

PMS Interface Description

Version 8.10

National Tourism Data Supply Centre (NTDSC)

22.12.2021

1.Document Control

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Changes compared to v8.00 version of the document.

Changed where	Changed what
Section 12.8	The description for foglaloAllampolgarsaga falsely had guest's citizenship in it instead of the person's who made that booking.

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3. Glossary

In certain cases, the terms defined below do not necessarily mean the same to all actors. With the glossary, our objective is to clearly define each term within this document and to indicate what the Hungarian Tourism Agency means by each term.

- **Data Provision Identifier:** An identifier previously used as the NTAK Registration Number. The data content of the identifier has not changed, only its name, i.e. it is still a string of 8 characters in length. Accommodations may find this identifier at the ntak.hu site by opening the “box” of the corresponding accommodation under the Accommodation menu item.
- **CSR: Certificate Signing Request.** Use of certificates required for the identification of the accommodation for the provision of data to the NTAK. The PMS System generates Certificate Signing Requests (Certificate Signing Request – CSR) for such certificates, and by sending them it obtains the certificates to be used through the NTAK.
- **IFA: Tourism Tax.** Tourism tax is not required to be collected from guests by accommodations until 31 December 2020, in accordance with current legislation. Nevertheless, the Tourism Tax (IFA) return must be submitted to the municipality, given that the revenue thus lost is received by the municipality from the State.
- **NTAK:** Acronym for the National Tourism Database Centre developed and operated by the Hungarian Tourism Agency (HTA). This system collects anonymised statistical data from the accommodations, and provides data to stakeholders (HCSO, NTCA, municipal governments, HTA).
- **Out-of-order (abbreviated as OOO):** non-operating residential unit. We use this term for accommodation that is not in a condition to accommodate the guest at the time of making the reservation (or when the guest arrives) (for example, the room is being renovated or cannot be permanently rented out to a guest for any reason).
- **Out-of-service (OOS):** unused residential unit. We use this term for a residential unit that is currently not in operation but is suitable for the accommodation of guests. Typically, it can be set for residential units that need to be temporarily closed but are listed in the room rack as a rentable room (for example, short-term maintenance needs to be done in the residential unit).
- **Market segment:** What is the purpose of the guest’s visit to the accommodation and in what capacity do they visit (individual/group or leisure/business purposes).
- **PMS, PMS software:** Acronym for Property Management System, i.e. the abbreviation for the property management software. This is how we refer to the hotel systems used

by the accommodation providers in the documentation and to the MY GUEST application provided by the HTA.

- PMS interface: The NTAK's module for receiving data from PMS software. This document contains the form and content related requirements for sending data, i.e. the requisites for connecting to the PMS interface. Based on the Act referenced on the NTAK Info website (<https://info.ntak.hu/bemutatkozas/>), it is mandatory for each accommodation to use a solution suitable for connecting to and sending data over the PMS interface.
- Accommodation: Entity used to pursue commercial accommodation services on the basis of Act CLXIV of 2005. Accommodation providers can be assigned unequivocally to every accommodation.
- Accommodation service provider: Entity engaging in commercial accommodation services based on Act CLXIV of 2005, which interfaces with the NTAK as a Data Provider and/or a User receiving data provision, consistently with its respective access rights to the System.
- Certificate: An electronic document, duly signed digitally by the issuing authority, containing in indivisible form the identity data (e.g. name) of the certificate holder and the public code key of the holder. This is used by the system to authenticate the exchange of messages between PMSs and the NTAK, and requests it from the data sender endpoints.

4. Introduction

The Hungarian Tourism Agency (later on in the present document: HTA) establishes the *National Tourism Data Supply Centre* ((later on in the present document: NTAK) to provide information for making decisions regarding tourism development, and to facilitate the whitening of the sector. The objectives to be supported are closely connected to the National Tourism Development Strategy 2030 goal of Digital tourism and Measurable tourism.

In order to meet these goals, a unified IT system is created for HTA within the framework of this project, one that is capable of maintaining continuous a data connection between the system and the property management software installed at the accommodations.

This document describes the prerequisites for integrating the NTAK system with the PMS software, the necessary configuration for integration on the PMS side, as well as its communication channels and the rules for data transmission. The scope of the document does not include guidelines for the internal data structure, architecture, or modules of the PMS systems; it only contains the information strictly necessary for connection to the NTAK system.

There are three prerequisites for using the communication PMS integration channel of the NTAK system: the PMS software instance **must be authenticated with a certificate**, the PMS software instance **must be correctly configured**, and the **first test message must be successfully sent** between the PMS software and the NTAK system, to be detailed later.

The PMS integration of the NTAK system, the data transfer by the PMSs distinguishes three communication modes: event-driven data transmission, daily closure data transmission and advance-booking data transmission.

Event-driven data transmission

The first is the **event-driven** communication mode. The PMS software must send a message to the NTAK system when certain events, to be detailed later, occur. The message to the NTAK system shall include the event and related vital information.

Daily closure data transmission

The second communication mode is **sending the daily closure**. This involves the PMS software sending detailed, statistical information about the closed day to the NTAK system. The daily closure data transmission is a technological solution including two datasets from a content-logic aspect: data transmission regarding accommodation services providing activities related to accommodations (to be submitted on a daily basis), and revenues from non-

accommodation services (to be submitted on a monthly basis, by no later than the fourth day of the following month).

Advance-booking data transmission

Sending reservations details is the third mode of communication. It involves the PMS software sending detailed booking data to the NTAK system. Such booking details are transmitted when a given reservation is registered or modified. Additionally, all reservations registered in the PMS at the given time will need to be sent to the NTAK System upon connecting to it. A summary of the exact means for transmitting advance booking data is provided in the “Communication Modes” section.

The NTAK system receives data from the PMS software via the above communication modes, through standard interfaces. Major datasets of the interfaces, in respect of which the NTAK System receives data provision from PMS software, include the following:

- **Lakoegysegejszaka:** for accommodations, an accommodation unit night denotes a night spent in a room, while for campsites, it means a night spent at a camping spot. This provides the option of grouping by **Spending** on the given day, and for managing **Guests** who spent the night at the accommodation unit.
- **ErtekesitesiCsatorna:** This is where sales channels are transmitted. (Direct – online; Direct – conventional; Agent – online; Agent – conventional)
- **Vendeg:** submission of guest data required for statistical purposes.
 - as the personal information of guests are received in an already anonymized form, a **külsőID** (external ID) is required, linking the guest nights to the appropriate person.
- **ifaStatusz:** This is the value that stores the tourism tax ('IFA') payment obligation mapped to the respective Guest.
- **Koltes:** spending can be allocated to a **guest night** (if it can be directly connected to the guest), or to the **accommodation unit night**, with the dataset representing the amounts spent.
- **KoltesTipus:** Payment types associated with the spending (cash, bank card, OTP SZÉP card)
- **KoltesAITipus:** This value stores the subaccount types for the various cafeteria allocations – the field is mandatory if the value of KoltesTipus is SZEP_KARTYA, otherwise it is not.

- **Vendegejszaka:** Number of nights spent by a guest at the accommodation. One guest can be assigned a single guest night for any given date.
- **vendegEvent:** This object represents the data event, when using event-driven data transmission

The detailed list of data is explained in Section 12.

5. Recommendations

The following recommendations were made by the HTA in order to improve the quality of the data sent in the course of daily data provision. PMS software-side integration of recommendations is optional, but implementations of individual recommendations may become mandatory in later versions of the PMS interface.

5.1. Guest information

5.1.1. The sending market is unknown

In some cases, the guests' sending country is unknown at the time of booking, so the accommodation cannot record it in its own system. In such cases, the HTA recommendation is that the guest be recorded as an unknown foreign guest. Currently, the PMS interface allows you to record the option 'OTHER' sending country.

5.1.2. Guest's age

In some cases, there may be an extreme value indicated for the age of the guest and the accommodation will send that data to the NTAK. Our recommendation is that the PMS software filter the age of guests uniformly, i.e. it prevents the guest from entering the system in the case of guests older than 120 years. Above a certain age, it is also advisable to send a warning to the user (e.g. over 100 years) asking whether the age of the guest is definitely over 100 years.

For guests between the ages of 0-1, we recommend considering the age of the guest to be 0 years.

5.1.3. The guest's sex.

In some cases, there may be only guests of the same sex staying at an accommodation. This case cannot be completely ruled out, but we recommend that if the PMS provider detects that the proportion of guests' sexes is significantly unbalanced over a period of time (viewed within one day: 90% to 10% or worse at the expense of either sex), you should warn the user of the software that the ratio of sexes varies significantly.

5.2. Filter out extreme revenue/debit data on the PMS side

Our aim is to prevent the transmission of revenue and debit data to the NTAK that can be clearly determined to be unrealistic.

5.2.1. Primary extreme value limits

The NTAK uses the extreme value observations listed below. In the event of such cases occurring, it is advisable to warn the user only of the presumption that an extreme value has

been recorded **at the time of recording**. We do not yet recommend a ban on exceeding the primary extreme value in data entry, as there may be cases that justify extreme values.

Recommended extreme value limits for accommodation charges:

- in the case of hotels: Accommodation charge > HUF 450,000 or < HUF -450,000
- in the case of pensions: Accommodation charge > HUF 115,000 or < HUF -115,000
- in the case of all other types of accommodation: Accommodation charge > HUF 60,000 or < HUF -60,000

In the case of other debit or income items:

- food > HUF 200,000 or < HUF -200,000
- beverages > HUF 45,000 or < HUF -45,000
- health cure and wellness services > HUF 30,000 or < HUF -30,000
- other > HUF 100,000 or < HUF -100,000.

In addition to the above, the following rules should be considered when filtering extreme values:

- daily sum debit per accommodation <= HUF 200,000,000
- daily sum debit per accommodation >= HUF 0
- daily REVPAR per accommodation <= HUF 300,000
- daily REVPAR per accommodation >= 0 HUF.

Example: in the PMS software it may occur that the user enters the value of the accommodation charge (or other item) in HUF and they may not notice that the item is recorded in a currency other than HUF. There is a good chance that such a case can be avoided by warning the user.

5.2.2. Secondary extreme value limits

Secondary extreme value limits are 10 times the primary extreme value limits (that is, for example, for hotels, with regard to the accommodation charge, items more than HUF 4.5 million and less than HUF -4.5 million).

Values outside the secondary extreme value limits in the displayed numbers (debit, REVPAR, average room rate) should be considered zero with the proviso that the original data should be kept on the PMS side but not submitted to the NTAK system.

5.3. Legal treatment of VAT values

We recommend that the legal follow-up of VAT changes be managed at the level of the PMS software, i.e. it is advisable to avoid that the accommodation provider can edit or modify VAT rates within its own competence.

5.4. Implementation of a daily closing checklist

We recommend that the accommodation have the opportunity to make a trial daily closing before its daily closing, from which they can notice any incorrectly recorded data (such as extreme accommodation charges) before the actual closing and correct them before completing the daily closing. The checklist should primarily display the data to be submitted to the NTAK and check those to avoid erroneous daily closing data.

5.5. Accommodation charge management

The accommodation charge submitted to the NTAK must include only the accommodation charge. In many cases, the price of breakfast (or other services/products) is included in the accommodation charge and sent to the NTAK at the same time. Items not related to the accommodation charge should be sent separately, i.e. in the case of the services sold in a package, it is also necessary to separately show the accommodation charge and other income.

5.6. Managing post codes of neighbouring countries

Based on the post code tables provided by the HTA, we ask that the PMS service providers incorporate the post codes and settlements belonging to the neighbouring countries into their systems in order to obtain a more accurate picture of the region, settlement and county of the guests arriving from abroad. We recommend that the PMS software should allow to record only the post codes listed in the table for the specified sending countries. This can significantly improve the accuracy of post code data.

6. Prerequisites

6.1. Issuing of Certificates

PMS software use a client certificate to identify themselves to the NTAK system, and add electronic signatures based on a stamp certificate to the data packets that are submitted. The workflow for issuing certificates is as follows:

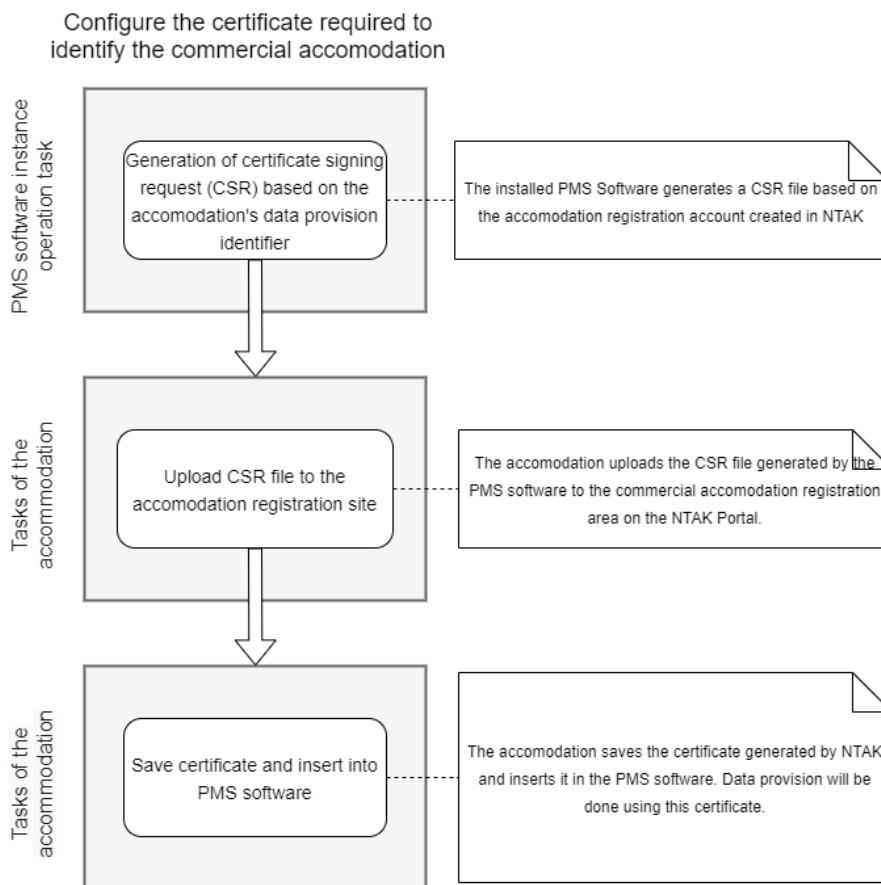


Figure 1 – Managing certificates in the NTAK System

6.1.1. Generating CSR files

Certificates need to be used for the purpose of identifying accommodations in order to enable data provision in the NTAK System. The PMS System generates Certificate Signing Requests (CSRs) for such certificates. When generating CSR, the fields containing the data of the accommodation (including data provision identifier) do not need to be filled, these are sent by the NTAK system as metadata of the uploaded CSRs to a certificate generating application.

Certificates to be generated include the following:

- Signature Certificate – For digitally signing submitted data packets
- Authentication Certificate – For establishing an HTTPS channel

The PMS application with NTAK System connectivity must perform the following actions in the context of managing the respective accommodation signature or authentication certificate with which it was issued:

- It may use the private key linked with its signature certificate only during data provision to the NTAK System, and solely for the purpose of generating an electronic signature; no other use is permitted (e.g. identification or encryption or signing emails).
- It may use the private key linked with its authentication certificate only during data provision to the NTAK System, and solely for the purpose of identification within the secure communication channel; no other use is permitted (e.g. signing codes or signing emails).
- Private keys whose validity has expired or those that are linked to revoked certificates may not be used to generate an electronic signature.
- The PMS application is required to provide an appropriate level of protection for its private key and activation data.

CSR files to be generated must comply with the following requirements:

- Certificate requests are in PKCS#10 format
- Certificate requests include the public key that the PMS application generates
- Certificate requests use the SHA-256 hash generation algorithm
- Certificate requests were created using RSA 4096 key pair generation

6.1.2. Uploading CSR Files to the NTAK Portal

The accommodation uploads CSR files that are ready to the system using the commercial accommodation registration area on the NTAK. Once the CSR has been uploaded, the NTAK System schedules certificate generation, and provides the respective user with the certificates that are ready, **not** in real time. The NTAK notifies the provider operating the respective accommodation about the result of issuing certificates by email, using the address specified in NTAK. The notification email does not include the certificate. That can be downloaded from the accommodation's profile page after identification through logging in to the NTAK.

6.1.3. Saving Certificates, and Inserting into the PMS Software

The accommodation downloads certificates that are ready from the NTAK Portal UI, and imports them to its PMS software. After successful import, the accommodation is ready to send the first test message to the NTAK.

6.1.4. Revoking Certificates

A certificate must be revoked in case the private key mapped to the certificate is destroyed or falls into unauthorised hands. The authentication service only supports the full certificate revocation process, i.e. transitional suspension of certificates is not supported.

An accommodation's duly authorised representative may initiate a certificate revocation request using the NTAK Portal UI. Because the NTAK keeps records on and lists the certificates issued to the given accommodation earlier and are valid, revocation can be initiated by selecting the respective list item.

An explanation must be provided for the revocation request. In providing an explanation, a pre-configured list has to be used to select the potential reason, and a free-text comment must be added to that. In technical terms, the reason selected for certificate revocation does not necessarily have to match the ReasonCode detail appearing on the CRL list or the OCSP response.

The accommodation certificate revocation request processing workflow runs asynchronously between the NTAK System and the certification authority.

The NTAK System displays the details of the confirmation received from the certification authority about the result of revocation to the user.

6.2. Registration of PMS software

One of the prerequisites for data provision by way of the PMS software is to have the given PMS version registered with NTAK's operator. During registration, NTAK's operator checks that the operation of the given PMS version's data provision features is in line with the applicable legal regulations. If data provision features operate correctly, NTAK's operator adds the PMS version to its records. This registration must be repeated for every major release.

6.3. NTAK registration – Accommodation service providers and accommodations

The accommodation sending data and the accommodation service provider operating the respective accommodation having active registrations in the NTAK System is a prerequisite for data provision. The first step involves the need to register the accommodation service provider by a duly authorised user. Next, the accommodations belonging to the accommodation service provider can be registered.

While registering the accommodation, the user must choose which PMS system to use for fulfilling their data reporting obligation. The list of PMS systems that can be selected during registration is generated from the PMS systems included in NTAK's records.

The NTAK Portal maps a unique identifier, the **data provision identifier**, to the accommodation when it is registered. NTAK will subsequently check for this unique identifier in the header of any messages the PMS system sends, as well as in the CN field of the certificate issued for the accommodation.

6.4. The PMS Software's First Test Message

Using the V7 endpoint of the PMS interface, the NTAK system allows the front-office system to test its messaging process by sending and receiving test messages. Sending test messages is optional, the process does not need to be performed to bring the front office system online. The test message sending option has been disabled for the V8 endpoint of the PMS interface.

When a particular version of the front-office system (PMS) sends a message to a particular V7 endpoint of the NTAK system for the first time, the NTAK system may optionally first allow a test message to be sent and received. The PMS software uses this exchange of messages to check whether it is able to transmit the data as required by the NTAK system, including the encryption of any personally identifiable information.

The front-office system must send the details generated using the received data to the test data endpoint, where the system will verify satisfactory data upload. It also verifies that no personal data has been uploaded, and that the hash value sent by the PMS software is correct for the encryption method used. If the test data is uploaded successfully, the NTAK system stores the authentication date and time for the front office software.

7. Steps for Connection

This section describes the steps a PMS software user (accommodation) must take for connecting to the NTAK system.

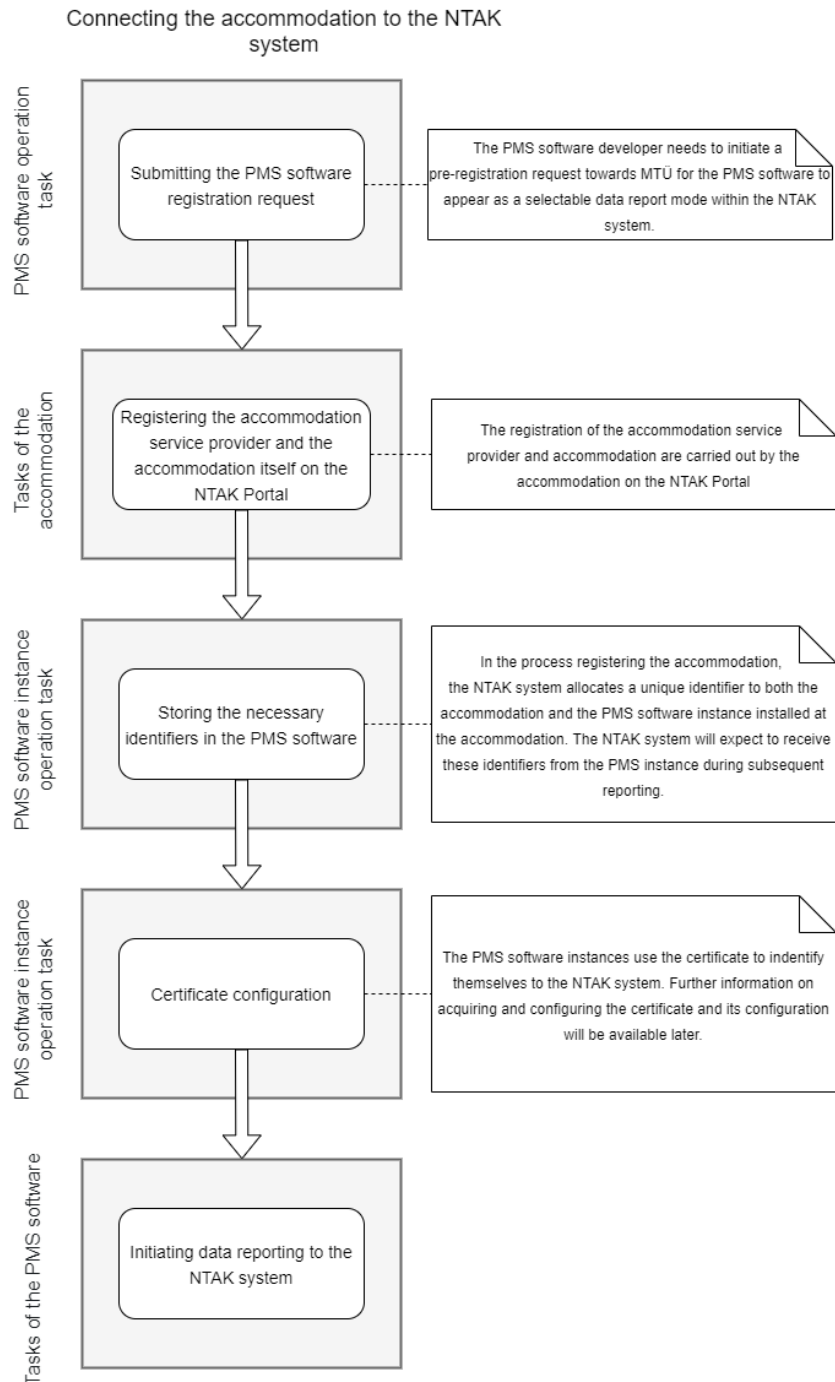


Figure 2 – Data provision configuration steps

7.1. Submitting the PMS software registration request

When an accommodation is registered in the NTAK System, the user performing registration can select the PMS software they intend to use for data reporting. In order for a particular PMS software to be included among the items available for selection here, the owner/distributor of the respective PMS software will need to file a preliminary registration request containing the required PMS software details with HTA. The steps for PMS software registration will be provided in more detail later.




A screenshot of a web form showing a dropdown menu. The label above the menu is "Szálláshelykezelő szoftver". The selected option in the dropdown is "Hotel Service". A small blue downward arrow is visible on the right side of the dropdown box.

Figure 3 – Selecting PMS software during accommodation registration

7.2. Registering accommodation in the NTAK system

The next step is for the person responsible for data reporting to register the accommodation service provider and the accommodations, using the NTAK portal user interface. Once your accommodation is registered, you can click the edit (szerkesztés) button to view the registration number and the data provision identifier generated by the NTAK System, which are the following:



A screenshot of a web form showing registration details. It contains three input fields: 1. A dropdown menu labeled "Szálláshelykezelő szoftver" with "Hotel Service" selected. 2. A text input field labeled "Szálláshely regisztrációs száma" containing the value "PA20000218". 3. A text input field labeled "Adatszolgáltatási azonosító" containing the value "MVOW3KFY". To the right of the third field is a blue circular button with a white document icon.

Figure 4 – The NTAK System assigns a unique data provision identifier to the accommodation after it is registered

7.3. Storing the necessary identifiers in the PMS software

The above-mentioned data provision identifier, retrievable from the NTAK system, must be stored in the installed PMS software, as it will be necessary for subsequent data transmission.

PMS software – This line indicates the PMS software that the accommodation intends to use for data provision.

Data provision identifier – This identifier enables identifying the accommodation during daily closure, and when event-driven data are sent.

This ID will need to be sent to the NTAK System in the data provision message's "szallasAdatszolgaltatasiAzonosito" (accommodationDataprovisionID) field. This same ID also has the purpose of identifying the respective accommodation in the CN field of the certificate issued for the accommodation.

7.4. Certificate configuration

The PMS software uses a certificate to authenticate itself to the NTAK system. The means for managing certificates is explained in detail in Section 6.1. Example messages are provided among the annexes to this document.

7.5. Initiating data reporting to the NTAK system

After completing the above configuration steps, the PMS software is now ready to contact the NTAK system.

8. Steps for Sending a Message

This section describes the details of the messaging logic that the PMS software has to implement for integration with the NTAK System.

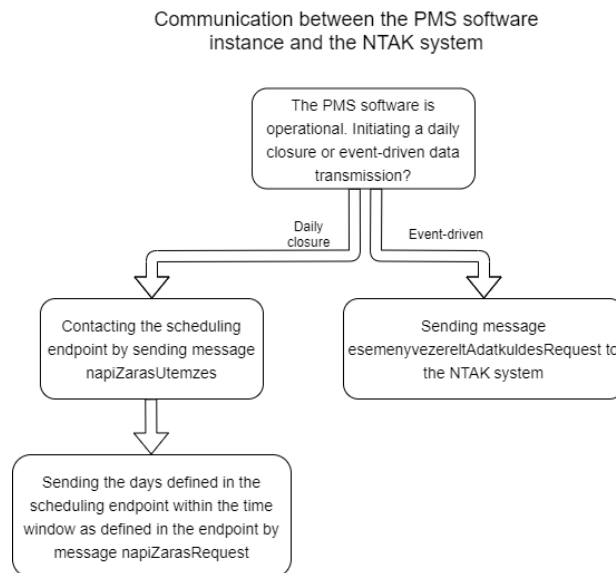


Figure 5 – PMS software messaging logic

8.1. Optional test message sending process

The test message sending function has been disabled for the V8 version of the NTAK PMS interface. The V7 version of the interface allows for sending an **optional** test message – however, the system does not require a test message to be sent before beginning data transmission.

Requesting Test Data from the NTAK System

Test messages can only be sent in the V7 version of the PMS interface. An exchange of **napiZarasTesztAdatRequest** messages must precede the data transmission. In this exchange of messages, the PMS software provides its basic information and requests a data package, which will then be included in the test message. The NTAK system sends a random response from test data stored in its database. The PMS software must return the received test data package in the appropriate format for the daily closure to the NTAK system.

The NTAK system allocates a message identifier to the test data sent. Responses are accepted only with this message identifier. In case of an incorrect response, the PMS software must initiate a new request, with a new message identifier.

8.1.1. Sending Test Data to the NTAK System

After transforming the data received from the NTAK System, the PMS software sends a **napiZarasTesztRequest** message to the NTAK System. If the data transformation was successful, and the daily closure message was accepted by the NTAK system, the installed PMS software is then ready for live messaging.

8.2. The process of live messaging

There are two types of messaging within the NTAK system: event-driven and the daily closure messages. The two message modes use a different process.

The messaging modes of the NTAK system are described in **Section 9**.

9. Communication Modes

The NTAK system is integrated with the PMS software using HTTPS protocol, via SOAP webservice-based communication. The WSDL files assigned to the endpoints of the integration and the sample request – response xml messages can be found in **Appendices**.

9.1. Daily closure data transmission

The communication mode for daily closure involves the use of two endpoints.

9.1.1. Scheduling Endpoint

The first is the **scheduling endpoint**. The PMS software receives the scheduling, i.e. when the PMS system needs to submit the data reporting, as well as the closed days to be included in the message.

By contacting the scheduling endpoint, the PMS system will learn what time interval it can use to send its daily closure data. Scheduling is necessary due to the high number of accommodations, ensuring that the NTAK servers are not overloaded, and making it possible to distribute the load evenly within the entire time interval used.

Any data submitted outside these windows will not be accepted by the NTAK system.

The PMS software queries the scheduling endpoint when the first message is sent, as well as after sending the daily closure messages.

9.1.2. Daily Closure Endpoint

The second endpoint is the actual **daily closure endpoint**, with the PMS software sending closure information to the NTAK system.

The data transmission mode used for daily closure involves the following process:

- 1.) The PMS software sends a synchronous request to the scheduling endpoint of the NTAK system in the context of the accommodation in question.
- 2.) The following information is sent in the synchronous response of the NTAK system to the PMS software:
 - a. What time windows the PMS software must use to send the daily closure data reporting.
 - b. Which closed day(s) are expected from the PMS software.
 - c. What message ID the PMS software is expected to use for its messaging.

- 3.) Is there an IFA value set in the NTAK for the accommodations in question by the municipal government, and if so, what is its value. If these fields have meaningful values in the message received from NTAK, this IFA value is to be used, even if the value stored by the PMS software differs from this. In case the automatism on NTAK system's side, responsible for filling in these fields is not in operation, the messages will not contain Forint values here. In this later case, the PMS software is free to use the IFA value stored in their own system. The PMS software sends the information in the WSDL of the daily closure to the daily closure endpoint of the NTAK system within the time windows defined in item 2.). The message contains the message ID generated by the NTAK system.
- 4.) The NTAK system replies to the daily closure message with a synchronous response
 - a. If the information was saved successfully in the database, a blank response is sent. It is important to note that regardless of whether the message was successfully saved, problems may occur during processing that will cause the NTAK Portal to re-request the message in the future, so the PMS software **must retain the submitted content for 2 weeks after it is successfully sent.**
 - b. If the received data are incorrect, or if an internal error occurred, an integration error code is sent to the PMS software.

The process then restarts. If the error persists, the NTAK system will not request a message that previously caused an error in the next query cycle, in order to avoid blocking other messages. The empty daily closure elements are saved with the integration error code and an incorrect status, so that they can be later retrieved.

In case the sending of a message runs to an error (or the scheduling window has expired), a new scheduling window will need to be requested from the NTAK Portal, and the new message ID thus generated has to be used to initiate daily closure.

Due to possible processing problems, the NTAK system may end up re-requesting a day that was already sent previously. To accommodate such cases, the PMS software **will need to retain the submitted messages for 2 weeks after successful sending.**

9.1.3. Using the Daily Closure Endpoint for Submitting Revenue from Non-Accommodation Services

The daily closure endpoint, described in this section, must be used for submitting revenues from non-accommodation services.

These revenues must be provided with the following breakdowns, and including the following data (as in the example for daily closure message):

- Revenues from non-accommodation services, broken down by the following categories:
 - o Revenue from catering
 - o Revenue from spa and wellness services
 - o Revenue from other services
- Including revenues from activities unrelated to accommodation service providing
 - o Value of accepted SZÉP cards

This data must be sent by the accommodations once a month (no later than the 4th day of the following month), either in response to a monthly data request by the PMS software, or via daily regular data reporting.

9.2. Event-driven data transmission

Event-driven data transmission involves a real-time, event-driven process. When a certain event occurs in the context of a particular accommodation in the PMS software, the PMS software sends a real-time message to the NTAK system, describing the event based on the contents of the WSDL file.

The following process describes the event-driven data transmission process in detail:

- 1.) If a **check in, check out** or **szoba váltás (room change)** event occurs at the accommodation assigned to the PMS software, it sends a message containing the data described by the WSDL of the event-driven endpoint to the NTAK system. These are handled in the following elements:
 - a. Arrivals: ErkezettType
 - b. Departures: TavozottType
 - c. Accommodation unit changes: LakoegysegCserekType
- 2.) The NTAK system replies with a synchronization response to the message.
 - a. If the data was saved successfully, an "OK" response is sent to the PMS software.
 - b. If the received data are incorrect, or if an internal error occurred, an integration error code is sent to the PMS software.

Event descriptions in the message:

- **Check in:** Every check-in event must be submitted to the NTAK System in the event-driven endpoint's "erkezett" (arrived) field. Where a check-in message sent to the NTAK System was incorrect, it needs to be corrected with a check-out message.
- **Check out:** Every check-out event must be submitted to the NTAK System in the event-driven endpoint's "tavozott" (departed) field. Where a check-out message sent to the NTAK System was incorrect, it needs to be corrected with a check-in message.
- **Szoba váltás (Room Change):** The list of room changes should be reported in the lakoegysegetCserelt (Changed Accommodations) field. Every room change includes an elhagyottLakoegyseg and an elfoglaltLakoegyseg field, as well as a field containing the information of guests moving from one room to another. Where a room change message sent to the NTAK System was incorrect, it needs to be corrected with another room change message with contrary content.

The (encrypted) guest ID generated using guests' personal data has to be submitted as part of the event-driven data transmission. The guest ID must therefore be generated, and the event-driven messages thus transmitted when the details required to generate the guest ID are fully available in the system.

9.3. Advance-booking data transmission

Like other communication modes, advance-booking data transmission is implemented using the SOAP endpoint. There are two ways to send advance-booking data:

1.) Sending existing reservations

After connecting to the NTAK System, the PMS software will need to transmit all of the reservations that are stored in the database with a **future arrival date**. At the time of the first submission of an advance booking, it is not necessary to submit reservation data with past arrival date. At least **5 seconds** of waiting time must be allowed between the submission of individual messages. The NTAK System will send a synchronous response for the incoming requests. If the booking data are not accepted by the NTAK system, due to reasons other than XML validation, these messages must be moved to the end of the message sending queue and must be re-attempted with delays of 5 seconds like the correctly submitted messages. If the message does not reach the NTAK system, for instance, due to network overload, sending must be re-attempted as long as the message does not reach the NTAK system.

2.) Real-time data transmission

After connecting to the NTAK System, the PMS software will need to transmit all of the bookings that will have been registered or modified in the system. The NTAK System will send synchronous responses when the various bookings are sent. If the booking data are not accepted by the NTAK system, sending must be re-attempted with delays of increasing length. Time intervals of 1 minute, 10 minutes and 60 minutes must be observed between the attempts.

The NTAK System identifies transmitted bookings on the basis of the identifier (`foglalasiSzam`) assigned to the respective booking. Where a PMS software transmits two bookings with the same booking ID, the NTAK System will consider the sent reservation events to be two distinct versions of the same booking. The NTAK System will sort the various booking versions based on the event creation (`esemenyLetrejeltes`) date field, i.e. the event created latest will entail the most up-to-date version for the given reservation. Modifying the booking also allows cancelling the reservation (`Lemondva`).

The details of the booking data transmission fields are explained in the **PMS Interface Message Elements** section.

3.) Advance-booking module error codes

Currently, the advance-booking module distinguishes between two types of errors: XML scheme validation error and application-side error.

XML scheme validation error handling

In the event that the advance-booking module sends an XML scheme validation error as a synchronous response to the request it receives, it means that some parts of the sent XML have been submitted incorrectly.

In this case, a SOAP Fault response will be sent out with the exact designation of the problem.

Example:

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
      <faultcode>SOAP-ENV:Client</faultcode>
      <faultstring xml:lang="en">Validation error</faultstring>
      <detail>
```



```

        <spring-ws:ValidationError xmlns:spring-ws="http://springframework.org/spring-ws">cvc-complex-
type.2.4.a: Invalid content was found starting with element 'ntak:foglaloAllampolgarsag'. One of
'{"http://mtu.gov.hu/ntak/v8":lemondva}' is expected.</spring-ws:ValidationError>

        </detail>

    </SOAP-ENV:Fault>

</SOAP-ENV:Body>

</SOAP-ENV:Envelope>

```

Timeout

During the initial data transmission, the advance-booking module may not send a synchronous response to some messages due to the amount of workload, and the connection may be disconnected due to timeout. In this case, it is necessary to re-send the message as described above 5 seconds after the timeout.

Application error codes

E1014 – Invalid certificate

This error is returned in the synchronous response from the advance-booking module if the "szallasAdatszolgaltatasiAzonosito" field in the message sent does not match the ID number in the CN field of the sender certificate.

Example:

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">

    <SOAP-ENV:Header/>

    <SOAP-ENV:Body>

        <SOAP-ENV:Fault>

            <faultcode xmlns:ns0="http://mtu.gov.hu/ntak/v8">ns0:E1014</faultcode>

            <faultstring xml:lang="hu">Érvénytelen tanúsítvány.</faultstring>

        </SOAP-ENV:Fault>

    </SOAP-ENV:Body>

</SOAP-ENV:Envelope>

```

Figure 7. - Advance booking—Invalid certificate error

E1004 - Server-side error occurred during data processing

If a non-specific application error occurs while validating or saving an incoming message, the advance-booking module returns an E1004 server-side error in response.

```
<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <SOAP-ENV:Fault>
      <faultcode xmlns:ns0="http://mtu.gov.hu/ntak/v8">ns0:E1004</faultcode>
      <faultstring xml:lang="hu">Szerver oldali hiba jelentkezett az adatfeldolgozás folyamán.</faultstring>
    </SOAP-ENV:Fault>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

Figure 8. - Advance booking—Server-side error during sending the message

10. Formal requirements

10.1. Encrypting personal data

The personally identifiable information of guests is encrypted in such a way as to make it possible to connect the person-related datasets of a particular accommodation, but still making it impossible to decrypt the individual's personally identifiable information.

To achieve this, we use a cryptographic hash function, BCrypt with a *salt* (which must remain constant regardless of circumstances) chosen by the accommodation, one which is only known to the system of the accommodation. Because collating the guest's personal data readily results in a character string that exceeds a length of 72 characters, and the BCrypt function is subject to a 72-character limit regarding its input (most of its implementations can deal with much longer strings, with only the first 72 characters taken into account), the BCrypt function is not applied directly to concatenated personal data. Instead, the SHA-256 hash function is applied to concatenated personal data first (it is not subject to such a limit), and the BCrypt function is then applied to the 64-character long string thus generated.

The last 31 characters of the sequence generated by BCrypt are the actual hash value, while the first 29 characters contain the applied algorithm, its other parameters, and the salt, and therefore should be discarded (the salt applied by the accommodation must not leave the accommodation's system). When receiving data, the NTAK system appends a unique identifier (GUID) to the Bcrypt hash value encrypted by the PMS software, then applies the function again on the resulting value, using a different constant salt value in the NTAK system, and finally takes the last 31 characters. This is then stored in the NTAK database.

The guest IDs described above must be generated when the details required to do so (i.e. the guests' personal data) are fully available in the system.

10.2. Example for encrypting personal data:

The example below was created using UTF-8 encoding, and results will not correspond with those shown here if other encoding formats are used.

Let us assume that a guest has the following personally identifiable information:

Name: dr. Edit Teszt

Birth name: Edit Teszt

Place and date of birth: Budapest

Date of birth: 12/07/1979

With the following applied salt values:

Unique, accommodation-generated and applied salt value example:

zDaBMMumxc/1rLNjHHg55O

In this case, the SHA-256 function is applied to the following character sequence:

dr. Teszt Edit Budapest 1979.07.12.

The resulting SHA-256 hash value is:

705567bdb3fe4ad7aea1bff6c13e10d436648ed5aa8bf754e764b5698a29c730

Next, the Bcrypt function is applied to the calculated SHA-256 hash value, using the accommodation's salt:

\$2a\$10\$zDaBMMumxc/1rLNjHHg55O473/rnEtql5aigjoPG33qz1uARVImcW

We then take the last 31 characters of the resulting sequence, which will be the value actually sent by the PMS software:

473/rnEtql5aigjoPG33qz1uARVImcW

The character string resulting from the transformation described above must be entered in each guest's **vendegId** field.

10.3. Digital signature of messages

The messages sent by the PMS software must be digitally signed. An extra Header, see below, must be added to the SOAP messages:

`<soapenv:Header>`

```

<wsse:Security xmlns:wsse="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-
wssecurity-secext-1.0.xsd"
xmlns:wsu="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-utility-
1.0.xsd">
  <wsu:Timestamp wsu:Id="TS-99DCEF25665EF438AC1542878420022417">
    <wsu:Created>2018-11-22T09:20:20.022Z</wsu:Created>
    <wsu:Expires>2018-11-22T21:20:20.022Z</wsu:Expires>
  </wsu:Timestamp>
  <wsse:BinarySecurityToken
EncodingType="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-soap-
message-security-1.0#Base64Binary"
ValueType="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-
profile-1.0#X509v3"
wsu:Id="X509-99DCEF25665EF438AC1542878420024418">
MIIETCCAw2gAwIBAgITBuj4o5glf00GUEd+GGiYy15XbjANBgkqhkiG9w0BAQsFADBQMRow
GAYDVQQDDBFNb2JpbFNpZ24gRGVtbjBDQTESMBAGA1UECgwJTW9iaWxTaWduMQswC
QYDVQQGEwJIVTERMA8GA1UEBwwlQnVkYXBic3QwHhcNMTgxMDMxMDcwODEwWWhcNM
jcxMDI5MTMwODEwWjA/MQ4wDAYDVQQDDAVudGFrMDENMA5GA1UECgwETIRBSzELMA
kGA1UEBhMCSEUxETAPBgNVBACMECEJ1ZGFwZXRhZG9wZXRhZG9wZXRhZG9wZXRhZG9w
Q8AMIIBCCgKCAQEAUQ/qSgme3MqInTWqL5ynRB736Z06g7Z3kyLuX7Im3UNT7T3Lco/v0IHkF
gQUVBPAROWyfySP6uOAiEoFg2cl+7DIjriSCmv/hRuZyuFbd24UlmHq59YUtku7zNyT5O076af
9vGI6Dntwka6ZIPfGDPKy/8c+p8GEU51qLLbmC8uTHQ8Zp2wVsG+5EoPghvYsyNobiOZ163
mcZooN5PRM0eARN6ukUjdRzR65Ri/gP3eRUew681qJ7qLeLj5A3pyPW8FRWIRDGriCXP5CP
kQLgGT8UkoXGS8Pbc/0I9XqYB4BMBIb9QSkKqedKmiUg6/z7Hk9CazNhqKt3o++ORLoiyQIDA
QABo4IBBzCCAQMwDAYDVR0TAAQH/BAIwADAdBgNVHQ4EFgQUX/zQ8WSSOIE7uG/pD65
H5QaS/PowHwYDVR0jBBgwFoAU02ga2YQZHURkwb8pF8tB8tqw0wDgYDVR0PAQH/BAQ
DAgXgMBMGA1UdJQQMMAoGCCsGAQUFBwMCMC8GA1UdHwQoMCYwJKAioCCGHmh0d
HA6Ly9yZXBvL3BraS9jYS9kZW1vLWNhLmNybDBDbGgrBgEFBQcBAQRME8wIQYIKwYBB
QUHMAGGFWh0dHA6Ly9yZXBvL3BraS9vY3NwLzAqBggrBgEFBQcwoAoYeaHR0cDovL3JlcG
8vcGtpL2NhL2RlbW8tY2E5Y2VyMAOGCSqGSIb3DQEBCwUAA4IBAQBw0hvmHhofC/3e43eD
yINECc8IGGollpWXJU5rV1OaNRNscxHMBD+D5B0bjPvioU1CzNxrWhSc1ohav5J2cM26dk7
DoAhCscovrUHru+s+MoK3cvKyixFUAWY/iWR+SRwMsjczXliFMKI9U4j3Z7A4xfJD5HRidcaMc
6nhEYB/ztlQ1IKYTuuX+wQz7Q6ihEnlnT3kpsdJOBETkmahNPwGC7Rcx+NQVKhtuZ8qFqw5kg
fVe+ZMARph76Tt4y0AUhKtwRbVxliBL3vVKYcL+svAaEJFkKtJyRe9sttU2wPjUnROcAhkBMrp
ZGTrGu3/Tqs76tKjTN9T8jOwxw0sU5
  </wsse:BinarySecurityToken>
  <wsu:Timestamp wsu:Id="TS-99DCEF25665EF438AC1542878420022417">
    <wsu:Created>2018-11-22T09:20:20.022Z</wsu:Created>
    <wsu:Expires>2018-11-22T21:20:20.022Z</wsu:Expires>
  </wsu:Timestamp>
  <ds:Signature Id="SIG-
99DCEF25665EF438AC1542878420025422" xmlns:ds="http://www.w3.org/2000/09/xmldsig
#">
    <ds:SignedInfo>
      <ds:CanonicalizationMethod Algorithm="http://www.w3.org/2001/10/xml-
exc-c14n#">
        <ec:InclusiveNamespaces PrefixList="napi soapenv" xmlns:ec="
http://www.w3.org/2001/10/xml-exc-c14n#" />
      </ds:CanonicalizationMethod>
      <ds:SignatureMethod Algorithm="http://www.w3.org/2001/04/xmldsig-
more#rsa-sha384" />
      <ds:Reference URI="#TS-99DCEF25665EF438AC1542878420022417">
        <ds:Transforms>
          <ds:Transform Algorithm="http://www.w3.org/2001/10/x
ml-exc-c14n#">
            <ec:InclusiveNamespaces PrefixList="wsse na
pi soapenv" xmlns:ec="http://www.w3.org/2001
/10/xml-exc-c14n#" />
          </ds:Transform>
        </ds:Transforms>
        <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-
more#sha384" />
        <ds:DigestValue>lah3dwhS7Dt+S68mDaiHKh6yoZhtflSuddShguX
EMFScUjtsoZTjqAqM/6vzzlue</ds:DigestValue>
      </ds:Reference>
    </ds:SignedInfo>
  </ds:Signature>

```

```

<ds:Reference URI="#id-99DCEF25665EF438AC1542878420025421">
  <ds:Transforms>
    <ds:Transform Algorithm="http://www.w3.org/2001/10/xml-exc-c14n#">
      <ec:InclusiveNamespaces PrefixList="napi" xmlns:ec="http://www.w3.org/2001/10/xml-exc-c14n#" />
    </ds:Transform>
  </ds:Transforms>
  <ds:DigestMethod Algorithm="http://www.w3.org/2001/04/xmldsig-more#sha384" />
  <ds:DigestValue>CyXbk24xM3GMq9PJE9pAl4wB8sXjn/XLlxoRY3Ygu/i99M/sKt74lhvLWvCulcb1</ds:DigestValue>
</ds:Reference>
</ds:SignedInfo>
<ds:SignatureValue>lokbshoT3uyjbke4bvqj6tzVW/z4JSNBPPvojk8JFaK4FqVPPm/XVW/MPJ5hkmEMLcYAoqZaas1Ag0v5aR7b0MfFv/XipCuyC1zuBrUMBFhIwgNM5D1trAimNOovsqcgiVQhwtJ+Kuwg194rmBu7Qll4P+NYMwckXlIECGgdaqTfuW3pxCmlQrgn1Ogi6GqlynKOxDBzQK4K8xs4MmHi4s3FyjXbtxk+7CeMGBVKVpHa6PksfyRaa/Zl8WI09y0nui7DnL+BbtvMEWaC83H6pdQlc870Je41SwXyXS MI3moUEK+s2CPDkeT4vU7aeEGA91gPXYWhz2CKEZ6Fz9/D+A==
</ds:SignatureValue>
<ds:KeyInfo Id="KI-99DCEF25665EF438AC1542878420024419">
  <wsse:SecurityTokenReference wsu:Id="STR-99DCEF25665EF438AC1542878420024420">
    <wsse:Reference URI="#X509-99DCEF25665EF438AC1542878420024418" ValueType="http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-x509-token-profile-1.0#X509v3" />
  </wsse:SecurityTokenReference>
</ds:KeyInfo>
</ds:Signature>
</wsse:Security>
</soapenv:Header>

```

The above example was generated by the Wss4j library of Apache Main parts of the Security header:

- **Timestamp** – Date and time when the message was created, and its validity. The NTAK Portal will accept the message in 300 seconds from when the message is made out.
- **BinarySecurityToken** – Certificate linked to the key pair used for the signature, in Base64. The signature references this certificate for authentication. Detailed description: https://www.oasis-open.org/committees/download.php/21257/wss-v1.1-spec-errata-os-SOAPMessageSecurity.htm#_Toc118717134
- **Signature** – Structure describing the signature
 - **SignedInfo** – Contains data necessary for validating the signature, including:
 - CanonicalizationMethod – Describes the method for transforming XML data to the canonical format. For PMS, the XML-C14N method is the expectation (<https://www.w3.org/TR/2002/REC-xml-exc-c14n-20020718/>)
 - SignatureMethod – Designates the signature algorithm. For PMS, this is **RSA-SHA384, RSA-SHA256, RSA-SHA512**
 - Reference – list of the signed elements. For PMS, there is only 1, the URI referencing the SOAP_ENV:Body element based on the ID.
 - **SignatureValue** – Base64-encoded binary data of the actual signature
 - **KeyInfo** – Data structure describing the certificate linked to the key pair used for the signature. For, PMS this is necessary to identify the sender and verify the signature. The key must be identified in DirectReference mode, meaning

that KeyInfo contains a SecurityTokenReference element referencing the aforementioned BinarySecurityToken.

The most commonly occurring errors derived from Wss4j include the following:

- **FAILED_CHECK** – The message was transmitted with an incorrect signature.
- **invalidTimestamp** – The message was transmitted later than the date appearing in the created field plus a maximum of 300 seconds.
- **certpath** – The password of the certificate required for the signature is incorrect or the certificate cannot be found.

It is important to highlight that for data transmission to be successful over the NTAK PMS interface, the following http header needs to be used to invoke the SOAP endpoint:

- **Content-Type: „text/xml”**.

It is also important to note that the NTAK Portal application accepts the following signature algorithms:

- <http://www.w3.org/2001/04/xmldsig-more#rsa-sha512>
- <http://www.w3.org/2001/04/xmldsig-more#rsa-sha256>
- <http://www.w3.org/2001/04/xmldsig-more#rsa-sha384>

The SHA-1 algorithm contains multiple vulnerabilities and is therefore not acceptable.

10.4. PMS integration error codes

The error codes of the PMS interface are created as part of the WSDL describing communication, in the form of SOAP 1.2 Faults. As a synchronous response to incorrect messages, the NTAK system provides an identification code for the error, as well as a description. The following table shows examples for the business error codes used by the NTAK System's PMS integration interface. An example message showing a SOAP fault response to an incorrect message can be found in the **Appendices**.

E1004 – Server-side error

In case a server-side error occurs in the NTAK System during the processing of an incoming message, and the receiving of the respective message is thus unsuccessful, the NTAK System will send the E1004 server-side error message in its response to the request. This is the single error code in whose case the property management software must reattempt data transmission.

In case a server-side error occurs, the resending the given message will need to be attempted three times, with increasing delays between each attempt: Time intervals of 1 minute,

10 minutes and 60 minutes must be observed between the attempts. Where a server-side error message is received in reply to the message even after it has been resent three times, attempts will need to be discontinued in order to prevent infinite transmission loops. The resending of the messages must be re-initiated once the problem causing the error has been eliminated (i.e. after the support ticket is closed). The NTAK System will poll the PMS software for any unsend daily closure messages, and the software apps will be responsible for sending the affected event-driven and advance booking data.

E1003 – Incorrect data upload

In case a message transmitted over the PMS interface is satisfactory based on the xml validations, but it contains data that is incorrect in format or in terms of business, the NTAK System will return the E1003 error message.

Such a case can occur, for instance, if the PMS software transmits a daily closure to the NTAK System with an “out of order” flag, but the message nevertheless contains turnover details.

E1001 – Unknown data provision identifier

In case the NTAK System is unable to map a data provision identifier in the incoming message to a registered accommodation, the NTAK System will return the E1001 error message.

E1005 – Unscheduled upload

Where the PMS software transmits a daily closure message to the NTAK Portal without requesting a scheduling window, the system will return the E1005 error message.

E1006 – Incorrect time window

Where the PMS software transmits its daily closure message to the NTAK Portal outside its designated scheduling windows, the system will return the E1006 error message.

E1007 – Day outside scheduling uploaded

If, as part of transmitting a given daily closure, the PMS software also submits a day that does not appear in the scheduling response, the NTAK Portal will return the E1007 error. (It is important to note that the PMS software is free to send fewer days than listed, in which case the days the system did not receive previously will be requested again as part of the next scheduling request.)

E1010 – Non-validated software instance

Where an accommodation associated with the transmitted message has not yet successfully performed a test message transmission using its indicated software version, the NTAK System will return the E1010 error.

E1012 – Invalid test message ID

In case the message ID included in the test message the PMS software sends fails to match the message ID included in the test message request, the NTAK Portal will return the E1012 error.

This error message is only used in the V7 version of the PMS interface.

E1013 – Incorrect test message

In case the content of the test message sent by the PMS software fails to correspond with whatever content is expected, the NTAK System will respond with error ID E1013, as part of which it will transmit the sent and expected values of the data that caused the problem during validation.

This error message is only used in the V7 version of the PMS interface.

E1014 – Invalid certificate

Where the CN field in the certificate the PMS software uses contains other than the registration number of the sender accommodation, the NTAK Portal will respond with error ID E1014.

E1015 - Data transmission refused by server, please contact NTAK customer service

In some rare cases, a PMS software may send unverified, invalid messages to the NTAK system due to a malfunction. In this case, the system will request clarification in writing, and failing that, will temporarily suspend the data submission rights of the accommodation submitting the erroneous messages until such time as the malfunction is fixed. Until the suspension is lifted, the NTAK system will respond to all messages sent by the suspended accommodation with the error code above.

E1016 – Invalid signature algorithm

The request used an invalid signature algorithm.

E1017 – Repeated daily closure

The accommodations in question has already submitted a daily closure for the day in the request.

10.5. Managing Message Identifiers on the PMS Interface

The PMS interface uses message IDs to track messages between PMS software and the NTAK System.

Message IDs generated by the PMS software

In the case where communication is initiated by PMS software, it will be bound to send an ID generated in UUID format to permit the identification of the message it is sending.

PMS software will need to generate a message ID for the following message types:

- Scheduling endpoint request message
- Event-driven messages
- Advance-booking endpoint request message

The daily closure message ID **is not generated by PMS software**, instead, it will be bound to use the message ID the NTAK System sends in the scheduling endpoint response.

Message IDs generated by the NTAK System

The NTAK System sends message IDs to the PMS software in its scheduling endpoint response. The NTAK System will only accept subsequent daily closure messages bearing the message ID sent earlier on.

10.6. PMS Interface message versions

In case, after the NTAK application goes live, changes are made to the PMS interface messages that are incompatible with previous message versions, the NTAK System will accommodate both the old and the new types of messages in order to facilitate continuous data transmission, up until the necessary modifications can be completed. The validity of endpoints is communicated to developers by HTA.

By default, the PMS interface is enabled to accept messages that belong to the “v7” and “v8” namespaces:

- targetNamespace=http://mtu.gov.hu/ntak/v7

In case the changes to the PMS interface are not reverse compatible, the version will be bumped up, for example:

- targetNamespace=http://mtu.gov.hu/ntak/v8

Until the modifications are made, the system will keep accepting the old-version messages that were customary in the lower-version namespace so far, as well as the post-modification messages in the higher-version namespace.

The previous namespace version will be discontinued from the pre-announced date, and it will only be possible to transmit messages with the latest version from that point on.

10.7. Additional data validation

The PMS interface also performs additional validations (not included in the WSDL) when verifying incoming data. These are the following:

Matching tax number

The PMS interface checks whether the tax number fields in the issued certificate and in the header of the PMS message (szallashelySzolgaltatoAdoszam) match.

Confirm possible VAT rate percentage values

The PMS interface checks to see if the percentage value of the submitted VAT rates matches one of the following: 0, 5, 18, 27

A correct example of the above test would be:

```
<ntak:afaKulcs>  
  <ntak:szazalek>27</ntak:szazalek>  
</ntak:afaKulcs>
```

An **incorrect** example of the above test would be:

```
<ntak:afaKulcs>  
  <ntak:szazalek>13</ntak:szazalek>  
</ntak:afaKulcs>
```

Confirming the age of guests

The system also checks the age of submitted guests: the PMS interface will reject a sent message if the date in a guest's "szuletésiEv" field is earlier than 1900.

A correct example of the above test would be:

```
<ntak:szuletesiEv>1983</ntak:szuletesiEv>
```

An **incorrect** example of the above test would be:

```
<ntak:szuletesiEv>1583</ntak:szuletesiEv>
```

The guest's nationality and place of residence must be an ISO country code

The system checks the submitted guests' nationality and place of residence: both values must be valid ISO-2 country codes.

A correct example of the above test would be:

```
<ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>  
<ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
```

An **incorrect** example of the above test would be:

```
<ntak:allampolgarsagOrszagKod>QL</ntak:allampolgarsagOrszagKod>  
<ntak:lakohelyOrszagKod>QL</ntak:lakohelyOrszagKod>
```

The software version field may not be left blank in the message

The "szoftverVerzio" field of sent messages may not be left blank.

A correct example of the above test would be:

```
<ntak:szoftverVerzio>v1.3.0</ntak:szoftverVerzio>
```

An **incorrect** example of the above test would be:

```
<ntak:szoftverVerzio> </ntak:szoftverVerzio>
```

The room number field is mandatory

The "szobaszam" field of sent messages may not be left blank.

A correct example of the above test would be:

```
<ntak:szobaszam>489</ntak:szobaszam>
```

An **incorrect** example of the above test would be:

```
<ntak:szobaszam></ntak:szobaszam>
```

11.Special Use Cases

11.1. Change in the guest’s personal data

The NTAK System identifies each guest using a hash generated from their respective personal data. In case that hash value changes (e.g. due to correcting a typo in the personal data), the NTAK Portal would incorrectly consider the new hash value as a new guest.

In order to avoid that operation, the PMS software needs to generate the hash **from the personal identification data linked to the respective guest and sent during the first daily closure**, and store it for the particular guest. During daily closure or event-driven data submission, that will be the hash which needs to be sent to the NTAK System, even if the user’s personal data will have been changed in the meantime.

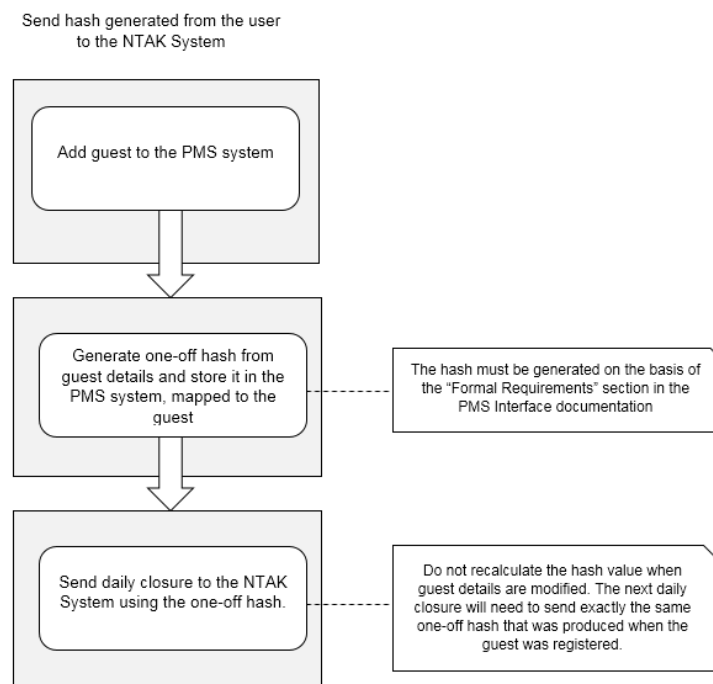


Figure 9 – Generating the hash from guest details

11.2. Managing Items Appearing on Technical Accounts

Where an accommodation manages various items on a technical account (i.e. one that is not linked to a room, e.g. a PayMaster account), the daily closure message will need to be submitted having regard to the following points:

- Items on the technical account which cannot be linked to any room or booking are to be sent in the other revenue message section.
- Items on the technical account which can only be linked to bookings are to be sent in the manner detailed in the **“Booking-level revenue”** section.
- Items on the technical account which can be linked to rooms are to be sent to the NTAK System in the standard way, in the sold accommodation unit section of the daily closure message.

11.3. Booking-level revenue

The NTAK System does not address bookings as a unit for grouping guests, so the interface provides no option for submitting revenue charged at booking, rather than room level. In such cases, items charged and spending at booking-level needs to be split equally in the interface among the rooms appearing in the respective booking.

Let’s assume that a booking has the following details in the PMS system:

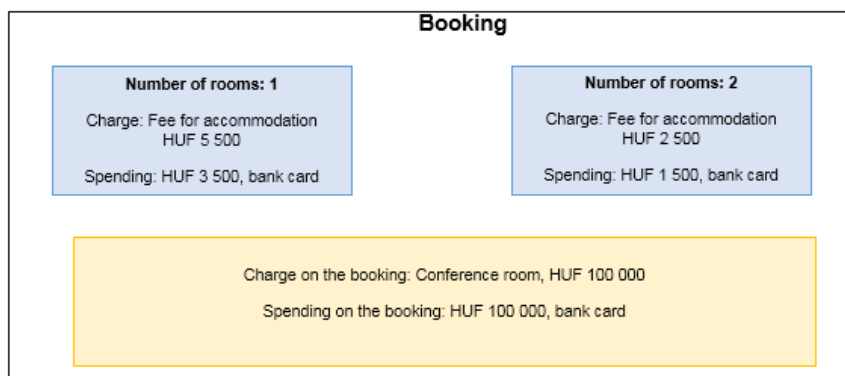


Figure 10 – Example of managing items charged to the booking and paid for

In this case, the response message needs to comply with the following points:

Rules to be observed for Room 1:

- The commensurate part of the charge to the booking should be included among charges to the room. In this case, it is HUF 50 000, with charge item type EGYÉB (other).
- The item charged to the room should be included among the room's charges: HUF 5 500 with type SZALLASDIJ (accommodation fee).
- The commensurate part of spending on the booking should be included among the room's spending. In this case, it is HUF 50 000, type BANKKARTYA (bank card).
- The spending charged to the room should be included among the room's spending: HUF 3 500, BANKKARTYA (bank card).

Rules to be observed for Room 2:

- The commensurate part of the charge to the booking should be included among charges to the room. In this case, it is HUF 50 000, with charge item type EGYÉB (other).
- The item charged to the room should be included among the room's charges: HUF 2 500 with type SZALLASDIJ (accommodation fee).
- The commensurate part of spending on the booking should be included among the room's spending. In this case, it is HUF 50 000, type BANKKARTYA (bank card).
- The spending charged to the room should be included among the room's spending: HUF 1 500, BANKKARTYA (bank card).

Example of message thus generated:

```
<soapenv:Envelope xmlns:ntak="http://mtu.gov.hu/ntak/v8"
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:napiZarasRequest>
      <ntak:uzenetId>82aa1b7f-f877-4929-9994-379c213f2a28</ntak:uzenetId>
      <ntak:szoftverVerzio>SzoftverNev: V1.0</ntak:szoftverVerzio>
      <ntak:szallashely>
        <ntak:szallasAdatszolgaltatasiAzonosito>AB123DH2</ntak:szallasAdatszolgaltatasiAzonosito>
        <ntak:szallasNev>Pelda Hotel</ntak:szallasNev>
        <ntak:szallashelySzolgaltatoAdoszam>
          01234567-0-01
        </ntak:szallashelySzolgaltatoAdoszam>
      </ntak:szallashely>
    </ntak:napiZarasRequest>
  </soapenv:Body>
</soapenv:Envelope>
```



```
<ntak:szallashelySzolgáltatoNev>
  Egy hotel szolgáltató BT
</ntak:szallashelySzolgáltatoNev>
</ntak:szallashely>
<ntak:napiFeltoltesek>
  <ntak:napiFeltoltes>
    <ntak:lezartNap>2018-09-12</ntak:lezartNap>
    <ntak:lezarasIdopont>2018-09-12T11:31:00Z</ntak:lezarasIdopont>
    <ntak:szobaAdatok>
      <ntak:osszesSzoba>5</ntak:osszesSzoba>
      <ntak:oooSzobak>2</ntak:oooSzobak>
      <ntak:ooSszobak>0</ntak:ooSszobak>
      <ntak:kiadottSzobak>1</ntak:kiadottSzobak>
      <ntak:kiadhatoSzobak>3</ntak:kiadhatoSzobak>
    </ntak:szobaAdatok>
    <ntak:lakoegysegEjszakak>
      <ntak:lakoegysegEjszaka>
        <ntak:ertekesítettLakoegyseg>
          <ntak:lakoegyseg>
            <ntak:epulet>A</ntak:epulet>
            <ntak:szobaszam>1</ntak:szobaszam>
            <ntak:tipus>ECONOMY</ntak:tipus>
            <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
            <ntak:ketfosAgySzam>1</ntak:ketfosAgySzam>
            <ntak:potAgySzam>0</ntak:potAgySzam>
          </ntak:lakoegyseg>
          <ntak:ertekesitesiCsatorna>KOZVETITO_ONLINE</ntak:ertekesitesiCsatorna>
          <ntak:piaciSzegmens>SZABADIDOS_EGYENI</ntak:piaciSzegmens>
          <ntak:foglalasiSzam>2020/00154</ntak:foglalasiSzam>
        </ntak:lakoegysegEjszaka>
        <ntak:koltesek>
          <ntak:koltes>
            <ntak:osszeg>3500.0</ntak:osszeg>
            <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
          </ntak:koltes>
          <ntak:koltes>
            <ntak:osszeg>50000.0</ntak:osszeg>
            <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
          </ntak:koltes>
        </ntak:koltesek>
      </ntak:lakoegysegEjszakak>
    </ntak:napiFeltoltes>
  </ntak:napiFeltoltesek>
```

```
</ntak:koltes>
</ntak:koltesek>
<ntak:terhelesek>
  <ntak:terheles>
    <ntak:osszeg>5500.0</ntak:osszeg>
    <ntak:kategoria>SZALLASDIJ</ntak:kategoria>
  </ntak:terheles>
  <ntak:terheles>
    <ntak:osszeg>5000.0</ntak:osszeg>
    <ntak:kategoria>EGYEB</ntak:kategoria>
  </ntak:terheles>
</ntak:terhelesek>
</ntak:ertekesítettLakoegyseg>
<ntak:vendegek>
  <ntak:vendeg>
    <ntak:vendegId>T36pxM10UrOpm1ZoRcZXYDFw28J4m7y</ntak:vendegId>
    <ntak:szuletésiEv>2000</ntak:szuletésiEv>
    <ntak:nem>FERFI</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>6726</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
  </ntak:vendeg>
</ntak:vendegek>
<ntak:nappaliHasznalat>false</ntak:nappaliHasznalat>
</ntak:lakoegysegEjszaka>
  <ntak:lakoegysegEjszaka>
    <ntak:ertekesítettLakoegyseg>
      <ntak:lakoegyseg>
        <ntak:epulet>A</ntak:epulet>
        <ntak:szobaszam>2</ntak:szobaszam>
        <ntak:tipus>ECONOMY</ntak:tipus>
        <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
        <ntak:ketfosAgySzam>1</ntak:ketfosAgySzam>
        <ntak:potAgySzam>0</ntak:potAgySzam>
      </ntak:lakoegyseg>
      <ntak:ertekesitesiCsatorna>KOZVETITO_ONLINE</ntak:ertekesitesiCsatorna>
```

```
<ntak:piaciSzegmens>SZABADIDOS_EGYENI</ntak:piaciSzegmens>
<ntak:foglalasiSzam>2020/00154</ntak:foglalasiSzam>
<ntak:koltesek>
  <ntak:koltes>
    <ntak:osszeg>1500.0</ntak:osszeg>
    <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
  </ntak:koltes>
  <ntak:koltes>
    <ntak:osszeg>50000.0</ntak:osszeg>
    <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
  </ntak:koltes>
</ntak:koltesek>
<ntak:terhelesek>
  <ntak:terheles>
    <ntak:osszeg>2500.0</ntak:osszeg>
    <ntak:kategoria>SZALLASDIJ</ntak:kategoria>
  </ntak:terheles>
<ntak:terheles>
  <ntak:osszeg>50000.0</ntak:osszeg>
  <ntak:kategoria>EGYEB</ntak:kategoria>
</ntak:terheles>
</ntak:terhelesek>
</ntak:ertekesítettLakoegyseg>
<ntak:vendegek>
  <ntak:vendeg>
    <ntak:vendegId>T36pxM10UrOpm1ZoRcZXYDFw28J4m7y</ntak:vendegId>
    <ntak:szuletésiEv>2000</ntak:szuletésiEv>
    <ntak:nem>FERFI</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>6726</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
  </ntak:vendeg>
</ntak:vendegek>
<ntak:nappaliHasznalat>false</ntak:nappaliHasznalat>
</ntak:lakoegysegEjszaka>
</ntak:lakoegysegEjszakak>
```

```

<ntak:uzemenKivuliSzobak>
  </ntak:uzemenKivuliSzobak>
<ntak:kijelentkezesNapiErtekesitesek/>
<ntak:egyebTerhelesek/>
  <ntak:egyebKoltesek/>
  <napi:tartozkodastKovetoKoltesek/>
  <napi:tartozkodastKovetoTerhelesek/>
</ntak:napiFeltoltes>
</ntak:napiFeltoltesek>
</ntak:napiZarasRequest>
</soapenv:Body>
</soapenv:Envelope>

```

11.4. Sending Post-Departure Charges and Spending to the PMS Interface

In certain cases it is possible for some of a guest's spending and charges to be transferred to the PMS System days or weeks after their departure.

As such items will have been generated after the guest has departed, it is impossible to send them in either the **ertekesitettLakoegyseg** or the **kijelentkezesNapiErtekesitesek** field, since both those fields are intended to track the spending and charges of currently occupied rooms or such that are departing on the given date.

The **tartozkodastKovetoKoltesek** and **tartozkodastKovetoTerhelesek** fields are used for this use case. These fields have to be completed as follows:

tartozkodastKovetoKoltes

This type can be used to send spending recorded days or even weeks after a room has been left. The following fields are available for this type:

- **Date:** This is where the invoice issue date needs to be referenced
- **KoltesType:** Standard type used in the PMS interface to indicate spending. To be completed in just the same way as elsewhere on the interface.

It is important to highlight that the room that generated the spending does not need be referenced for spending after the stay has ended.

Example:

[...]

```
<ntak:tartozkodastKovetoKoltesek>
  <ntak:tartozkodastKovetoKoltes>
    <ntak:datum>2001-01-31T08:04:09Z</ntak:datum>
    <ntak:koltes>
      <ntak:osszeg>24800.0</ntak:osszeg>
      <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
    </ntak:koltes>
  </ntak:tartozkodastKovetoKoltes>
</ntak:tartozkodastKovetoKoltesek>
```

[...]

tartozkodastKovetoTerheles

This type can be used to send charges recorded days or even weeks after a room has been left. The following fields are available for this type:

- **Date:** Departure date for the room of the guest to whom the spending can be linked.
- **TerhelesType:** Standard type used in the PMS interface to indicate charges. To be completed in just the same way as elsewhere on the interface.

It is important to highlight that the room that generated the charges does not need to be referenced for charges after the stay has ended.

Example:

[...]

```
<ntak:tartozkodastKovetoTerhelesek>
  <ntak:tartozkodastKovetoTerheles>
    <ntak:datum>2001-01-31T08:01:09Z</ntak:datum>
    <ntak:terheles>
      <ntak:osszeg>1260.0</ntak:osszeg>
      <ntak:kategoria>EGYEB</ntak:kategoria>
      <ntak:isIfa>false</ntak:isIfa>
      <ntak:afaKulcs>
        <ntak:szazalek>18</ntak:szazalek>
      </ntak:afaKulcs>
    </ntak:terheles>
  </ntak:tartozkodastKovetoTerheles>
</ntak:tartozkodastKovetoTerhelesek>
```

[...]

11.5. Managing Revenue from Non-Accommodation Services

It is possible to send the NapiFeltoltes, EgyebKoltesek and EgyebTerhelesek types during any of the daily closures within the given month or to correct them using negative values. The NTAK System will aggregate other revenue applicable to any given single month on a monthly basis (treating Other Spending and Other Charges separately). There are thus multiple possible ways for posting other revenue:

1. The PMS software will send Other Spending and Other Charges applicable to the given month as an aggregate end result on the last day of the given month.
2. The PMS software will send other spending and other charges applicable to the given date every day, adjusting the list with negative items where required. The NTAK System sums the values thus sent in at the end of the month.

Example for sending negative other spending:

[...]

```
<ntak:egyebKoltesek>
```

```
  <ntak:egyebKoltes>
```

```
    <ntak:osszeg>-4500.0</ntak:osszeg>
```

```
    <ntak:koltesTipus>KESZPENZ</ntak:koltesTipus>
```

```
  </ntak:egyebKoltes>
```

```
</ntak:egyebKoltesek>
```

[...]

11.6. Method for Sending Advance Payments

It is possible that an item is received for a certain booking in a PMS software tool weeks or months before the actual date of that booking. Such items will need to be sent to the NTAK System **between the dates of check-in and check-out (of the guest)**, in the 'koltes' field of the respective **ertekecsitettLakoegyseg** type. Where a guest paid the down payment in multiple instalments, it is the sum of spending generated per means of payment that should appear in the spending block.

Example for making a down payment:

Booking
Date of arrival: 04/03/2019 Room number: 200
Down payment 1 Date of payment: 10/12/2018 Means of payment: Bank card Total: HUF 10,000
Down payment 1 Date of payment: 12/12/2018 Means of payment: Bank card Total: HUF 2,000
Down payment 1 Date of payment: 14/12/2018 Means of payment: Bank card Total: HUF 8,000

Posted spending items
lezartNap: 04/03/2019 Room number: 200
Spending 1 Means of payment: Bank card Total: HUF 18,000
Spending 2 Means of payment: Cash Total: HUF 18,000

Figure 11 – Example for making a down payment

The PMS software will need to send the following message to the NTAK System:

```
<ntak:napiFeltoltes>
  <ntak:lezartNap>20019-03-04</ntak:lezartNap>
  [...]
  <ntak:koltesek>
    <ntak:koltes>
      <ntak:osszeg>18000.0</ntak:osszeg>
      <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
    </ntak:koltes>
    <ntak:koltes>
      <ntak:osszeg>2000.0</ntak:osszeg>
      <ntak:koltesTipus>KESZPENZ</ntak:koltesTipus>
    </ntak:koltes>
  </ntak:koltesek>
  [...]
</ntak:napiFeltoltes>
```

11.7. Splitting Food and Drink Consumption

The splitting of charge packages might be required in case a package contains both food and drink categories (e.g. coffee break provided as a package).

Food and Drink comprise two specific charge categories in the NTAK PMS interface, so such packages will need to be split having regard to the following rules:

- 1.) In case it is impossible to define the ratio of food and drink within a package, the respective package has to be split into two charge items, half each between the Food and Drink categories.
- 2.) In case the ratio of the items within a package can be specified, the aforementioned categories need to be split taking that ratio into consideration.

Example for splitting food and drink charges in an equal ratio (1):

- The combined value of the coffee break package is HUF 3,000 and no ratio can be specified

```
</ntak:terhelesek>
  <ntak:terheles>
    <ntak:osszeg>1500.0</ntak:osszeg>
    <ntak:kategoria>ETEL</ntak:kategoria>
    <ntak:isIfa>false</ntak:isIfa>
    <ntak:afaKulcs>
      <ntak:szazalek>18</ntak:szazalek>
    </ntak:afaKulcs>
  </ntak:terheles>
  <ntak:terheles>
    <ntak:osszeg>1500.0</ntak:osszeg>
    <ntak:kategoria>ITAL</ntak:kategoria>
    <ntak:isIfa>false</ntak:isIfa>
    <ntak:afaKulcs>
      <ntak:szazalek>18</ntak:szazalek>
    </ntak:afaKulcs>
  </ntak:terheles>
</ntak:terhelesek>
```

Example for splitting food and drink charges in an equal ratio (2):

- The combined value of the coffee break package is HUF 3,000 and 30% of that are drinks.

```
</ntak:terhelesek>
  <ntak:terheles>
    <ntak:osszeg>1500.0</ntak:osszeg>
    <ntak:kategoria>ETEL</ntak:kategoria>
    <ntak:isIfa>false</ntak:isIfa>
    <ntak:afaKulcs>
      <ntak:szazalek>18</ntak:szazalek>
    </ntak:afaKulcs>
  </ntak:terheles>
  <ntak:terheles>
```

```

        <ntak:osszeg>1500.0</ntak:osszeg>
        <ntak:kategoria>ITAL</ntak:kategoria>
        <ntak:isIfa>false</ntak:isIfa>
        <ntak:afaKulcs>
            <ntak:szazalek>18</ntak:szazalek>
        </ntak:afaKulcs>
    </ntak:terheles>
</ntak:terhelesek>

```

11.8. Bulk Entry of Guest Details

It is possible that so many guests arrive at a commercial accommodation establishment that the recording of their details needs to be processed subsequently. From the perspective of the NTAK System, in this case it will be important to send authentic guest details for guests whose arrival will already have been registered with that evening's daily closure.

11.9. Managing Vouchers

Voucher sales need not be posted to the NTAK System (vouchers already paid for, but available for use at a later date, e.g. gift vouchers), however, the use of such vouchers does. Where a voucher is used, the amount and means of payment for the voucher should be indicated in the 'koltes' section of the 'ertekesítettLakoegység' block. Means of payment should be voucher in such cases.

Example for posting sold vouchers:

```

[...]
<ntak:koltesek>
    <ntak:koltes>
        <ntak:osszeg>5000.0</ntak:osszeg>
        <ntak:koltesTipus>UTALVANY</ntak:koltesTipus>
    </ntak:koltes>
</ntak:koltesek>
[...]

```

11.10. Managing Currency Types on the PMS Interface

The NTAK System expects HUF as the currency across all of its fields containing currencies. In case a PMS software issues an invoice or charge in a currency other than that, the respective value must be converted to HUF, and the amount thus generated posted to the NTAK System.

11.11. Managing Closed State

Each commercial accommodation establishment's opening hours status applicable to a given date is sent to the NTAK System when the daily closure is posted. Where an accommodation is closed on a given date, it will need to post the daily closure message by toggling the 'NapiFeltöltés' type's **szallashelyNemUzemel** field to the 'True' value. In case the value of this field is 'False', the commercial accommodation establishment is in operation and accepting guests. If the PMS software was not online on a given date, data pertaining to that date can also be posted during a different daily closure, and the interface prompts for such days subsequently.

It is important to note that the „**szobaAdatok**” section still needs to be submitted for closed accommodations. The „**osszesSzoba**” field should contain the total number of rooms in the accommodation, and the „**oooSzobak**” field should also contain the same value. All other room fields should be 0.

Példa napi zárás üzenetre, amikor egy szálláshely zárva tartott:

```
<ntak:napiZarasRequest>
  <ntak:uzenetId>5eb21e71-2b56-4a5f-9086-42493c46f8e8</ntak:uzenetId>
  <ntak:szoftverVerzio>v1.2.0</ntak:szoftverVerzio>
  <ntak:szallashely>
    <ntak:szallasAdatszolgaltatasiAzonosito>reg00007</ntak:szallasAdatszolgaltatasiAzonosito>
    <ntak:szallasNev>Pelda szallas</ntak:szallasNev>
    <ntak:szallashelySzolgaltatoAdoszam>12345672-9-03</ntak:szallashelySzolgaltatoAdoszam>
    <ntak:szallashelySzolgaltatoNev>Pelda szolgaltato</ntak:szallashelySzolgaltatoNev>
  </ntak:szallashely>
  <ntak:napiFeltoltesek>
    <ntak:napiFeltoltes>
      <ntak:lezartNap>2001-01-02</ntak:lezartNap>
      <ntak:lezarasIdopont>2001-01-31T08:04:09Z</ntak:lezarasIdopont>
      <ntak:szobaAdatok>
        <ntak:osszesSzoba>5</ntak:osszesSzoba>
        <ntak:oooSzobak>5</ntak:oooSzobak>
        <ntak:oooSzobak>0</ntak:oooSzobak>
        <ntak:kiadottSzobak>0</ntak:kiadottSzobak>
        <ntak:kiadhatoSzobak>0</ntak:kiadhatoSzobak>
      </ntak:szobaAdatok>
    </ntak:napiFeltoltes>
  </ntak:napiFeltoltesek>
</ntak:napiZarasRequest>
```

```
</ntak:szobaAdatok>  
<ntak:szallashelyNemUzemel>true</szallashelyNemUzemel>  
</ntak:napiFeltoltes>  
</ntak:napiFeltoltesek>  
</ntak:napiZarasRequest>
```

11.12. Posting of Multiple Charge Items or Spending

Multiple charge items or spending can be posted to the NTAK System for a single room.

Example for posting multiple charge items and spending:

[...]

```
<ntak:ertekesítettLakoegység>
```

```
[...]
```

```
<ntak:költesek>
```

```
<ntak:költes>
```

```
<ntak:összeg>23800.0</ntak:összeg>
```

```
<ntak:költesTípus>SZEP_KARTYA</ntak:költesTípus>
```

```
<ntak:költesAlTípus>VENDEGLÁTÁS</ntak:költesAlTípus>
```

```
</ntak:költes>
```

```
<ntak:költes>
```

```
<ntak:összeg>10000.0</ntak:összeg>
```

```
<ntak:költesTípus>BANKKARTYA</ntak:költesTípus>
```

```
</ntak:költes>
```

```
</ntak:költesek>
```

```
<ntak:terhelesek>
```

```
<ntak:terheles>
```

```
<ntak:összeg>25400.0</ntak:összeg>
```

```
<ntak:kategória>SZALLASDÍJ</ntak:kategória>
```

```
<ntak:isIfa>false</ntak:isIfa>
```

```
<ntak:afaKulcs>
```

```
<ntak:százalek>27</ntak:százalek>
```

```
</ntak:afaKulcs>
```

```
</ntak:terheles>
```

```
<ntak:terheles>
```

```
<ntak:összeg>400.0</ntak:összeg>
```

```
<ntak:kategória>IFA</ntak:kategória>
```

```
<ntak:isIfa>true</ntak:isIfa>
```

```
<ntak:afaKulcs>
```

```
<ntak:százalek>0</ntak:százalek>
```

```
</ntak:afaKulcs>
```

```
</ntak:terheles>
```

```
</ntak:terhelesek>
```

</ntak:ertesitettLakoegyseg>

11.13. Date format used on the PMS interface

Date format expected by the system, e.g.:

- '2019-03-27'

Close date and time uses the ZoneDateTime type (ISO 8601), which requires close date to be accurate to the second, and must include the time zone; e.g.:

- 2019-03-27T08:04:09Z

Example for using date formats on the PMS interface:

[...]

<ntak:lezartNap>2019-03-27</ntak:lezartNap>

<ntak:lezarasIdopont>2019-03-27T08:04:09Z</ntak:lezarasIdopont>

[...]

11.14. Managing Extra Beds

In the NTAK System, statistical analyses are primarily based on capacity figures without extra beds, so there should not be any concern as to the value of extra beds requested for individual rooms boosting statistical data. However, theoretic capacity understood to include extra beds for a certain room could be included in the count for some reports, which is why the interface prompts for that information.

11.15. The System of Charges and Spending on the PMS Interface

The handling of revenues are broken down to two concepts that can be demarcated from each other:

Charge:

A gross sum charged to the guest's account as payment for a service, including VAT rate and service category. This is to be sent to the PMS interface based on the recording of the respective product or service.

The fee of accommodation and the value of tourism tax posted for a given day also constitute charges.

Spending:

Spending is a gross sum item paid by the guest without the VAT rate, with the NTAK System keeping records on its sum and type. This is to be sent to the PMS interface on the date when the invoice is issued.

Multiple spend and multiple charge items can be sent for each guest night.

It is possible for a charge to also appear as a spending in the system on the same date. That does not entail any problem, as they are to be sent to the PMS interface as separate items.

11.16. Managing Accommodation Fee Packages

Accommodation fee is understood as the amount payable for rooms (not including the prices of any other products and services).

If multiple rooms are sold in a package and the various rooms have no separable prices, then the value of the package must be posted per room, after being distributed prorata among the rooms it includes. Where the package price includes any product/service that cannot be split from the package, this will need to be sent to the PMS interface together with the accommodation fee.

11.17. Managing Day Use on the PMS Interface

The nappaliHasznalat field means that a certain ErtekesítettLakoegyseg was used on 'day use' basis and only during the day, i.e. the guest did not spend the night in the given accommodation unit. In case of day use, a particular ErtekesítettLakoegyseg may even be sent on the LakoegysegEjszakak list multiple times; however, it can only be sent once with the value of the nappaliHasznalat field set to false (since only a single night may be spent in a certain accommodation unit every day).

```
<ntak:lakoegysegEjszaka>
  <ntak:ertekesitettLakoegyseg>
    <ntak:lakoegyseg>
      <ntak:epulet>V.</ntak:epulet>
      <ntak:szobaszam>489</ntak:szobaszam>
      <ntak:tipus>ECONOMY</ntak:tipus>
      <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
      <ntak:ketfosAgySzam>2</ntak:ketfosAgySzam>
      <ntak:potAgySzam>0</ntak:potAgySzam>
    </ntak:lakoegyseg>
  <ntak:ertekesitesiCsatorna>KOZVETITO_ONLINE</ntak:ertekesitesiCsatorna>
  <ntak:piaciSzegmens>UZLETI_EGYENI</ntak:piaciSzegmens>
  <ntak:foglalasiSzam>2020/00153</ntak:foglalasiSzam>
```

```

    <ntak:koltések>
      [...]
    </ntak:koltések>
    <ntak:terhelesek>
      [...]
    </ntak:terhelesek>
  </ntak:ertekesítettLakoegység>
  <ntak:vendegek>
    <ntak:vendég>
      [...]
    </ntak:vendég>
  </ntak:vendegek>
  <ntak:nappaliHasznalat>true</ntak:nappaliHasznalat>
</ntak:lakoegységEjszaka>

```

11.18. Managing out-of-order rooms

Rooms that are out of order on the given date and do not receive any guests need to be posted to the NTAK System together with the respective daily closure. Therefore if a room is out of order on the day linked to the given date's daily closure, the room needs to be posted in the uzemenKivuliSzobak type on that day. Rooms that do not receive any guests on the given day qualify as out of order rooms on the PMS interface. Based on the nomenclature used in certain commercial accommodation management software, rooms in out of service status (i.e. ones that cannot be issued in the short term, not just for extended periods) are also in scope for this category.

Example of posting an out of service room over the PMS interface:

```

<ntak:uzemenKivuliSzobak>
  <ntak:lakoegység>
    <ntak:epulet>T</ntak:epulet>
    <ntak:szobaszam>239</ntak:szobaszam>
    <ntak:tipus>ECONOMY</ntak:tipus>
    <ntak:egyfosAgySzam>4</ntak:egyfosAgySzam>
    <ntak:ketfosAgySzam>4</ntak:ketfosAgySzam>
    <ntak:potAgySzam>0</ntak:potAgySzam>
  </ntak:lakoegység>
</ntak:uzemenKivuliSzobak>

```

In addition to the above, out of service rooms should also be listed in the „szobaAdatok” section under the „napiFeltoltes” type.

```

<ntak:napiFeltoltes>

```



```

<!--napiZarasUtemezesResponse-bo1-->
<ntak:lezartNap>2019-07-30</ntak:lezartNap>
<!--napiZarasUtemezesResponse-bo1-->
<ntak:lezarasIdopont>2019-10-01T10:00:00Z</ntak:lezarasIdopont>
<ntak:szobaAdatok>
  <ntak:osszesSzoba>5</ntak:osszesSzoba>
  <ntak:oooSzobak>2</ntak:oooSzobak>
  <ntak:oosSzobak>0</ntak:oosSzobak>
  <ntak:kiadottSzobak>1</ntak:kiadottSzobak>
  <ntak:kiadhatoSzobak>3</ntak:kiadhatoSzobak>
</ntak:szobaAdatok>
[...]
```

```

</ntak:napiFeltoltes>
```

11.19. Posting Incorrect Check In and Check Out Events

Event-driven data posting does not specify incorrect check in and incorrect check out events. Incorrect check in events need to be posted together with a check out event applicable to the respective room; and incorrect check out events can be corrected using a check in event applicable to the given room.

11.20. Managing Country Codes in the System

ISO 3166-1 alpha-2 type country codes need to be sent in the citizenship and country fields on the PMS interface.

Example of posting guest data by country code:

```

<ntak:vendeg>
  <ntak:vendegId>Gb37WNHu65PHNy59TIIu21CWwz40XBn</ntak:vendegId>
  <ntak:szuletésiEv>1983</ntak:szuletésiEv>
  <ntak:nem>N0</ntak:nem>
  <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
  <ntak:lakohelelyOrszagKod>HU</ntak:lakohelelyOrszagKod>
  <ntak:lakohelelyIranyitoszam>8477</ntak:lakohelelyIranyitoszam>
  <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
</ntak:vendeg>
```

11.21. Municipality-defined Tourism Tax Exemption Categories

Exemptions from tax liability under Section 31 of Act C of 1990 (on Local Taxes) can be specified in the following categories on the PMS interface:

- **KOTELES:** Subject to tourism tax payment obligation
- **im1:** Guest nights spent by those under 18 years of age
- **im2:** Guest nights spent in therapeutic institutions, specialist inpatient care or in social welfare institutions
- **im3:** Guest nights spent by those subject to legal relationship as students at secondary and higher education institutions, and those participating in vocational training
- **im4:** Guest nights spent by people in the line of duty
- **im5:** Guest nights spent by people whose stay is consequent to authority or court measures
- **im6:** Guest nights spent by entrepreneurs with a registered office or site of operations in the settlement or their employees or workers, due to work
- **im7:** Guest nights spent by entrepreneurs engaging in temporary business activity or their employees, due to work
- **im8:** Guest nights spent by private individuals who own or time-share a holiday property in the settlement, furthermore who are condominium association members and their family and relatives
- **im9:** Guest nights spent by members of clergy in a building or on a property owned by the church
- **im10:** Guest nights spent by people who have a permanent address or temporary place of residence in the settlement
- **im11:** Exemption under municipality by-law (Other)

In case a guest falls under a tourism tax exemption category that was prescribed by the municipal government on a one-off basis, the 'im11' value will need to be posted regarding the guest's tourism tax exemption.

11.22. The Concept of 'Day' on the PMS Interface

Any period may be designated a day defined on the PMS interface. When sending data, it is the figures applicable to the previous closed interval that are to be sent. When designating limits, the important criterion is that guest nights begun (which span to the next calendar day) are the basis for the tourism tax payment obligation specified in legal regulations, so the day-closure point must be designated on the calendar day that follows, in order to permit

distinguishing the guest nights constituting the tourism tax base for the day in review from guest nights begun on the next day.

For example, in case a day is closed at midnight, then a guest arriving at 12:01 am will spend the guest night that starts on the day in review, but will have been left out from figures for the day in review, and in turn from tourism tax records, which also results in data loss.

If the day in review is closed at 10:00 a.m. on the day after the day in review, but a very early arrival is checked in at 9:00 a.m., then tourism tax related to that guest will appear in the tourism tax report for the day in review, even though they did not spend the guest night starting on the day in review.

Day closure does not have to be automated, nor is this recommended. The commercial accommodation establishment operator will determine when the point comes when they do not wish to move any more guests in terms of the day in review, so the day can be closed.

Restrictions may need to be implemented in the system to force correct operation; it should not be possible to check in guests on the day following the day in review for as long as the day in review has not been closed.

11.23. Managing Tourism Tax

11.23.1. Calculating and submitting IFA totals

Tourism tax to be charged per guest can be regarded as a charge item from the perspective of the PMS interface, and is included in the 'Terheles' type. For per cent-based tourism tax values, the NTAK System expects to receive tourism tax results calculated with the following rule:

A value specified as a percentage of the full accommodation fee, in a form broken down per people to be posted if there are guests subject to tourism tax in the respective accommodation unit.

Example for the calculation of tourism tax:

- Overall accommodation fee: HUF 100.
- Number of guests: 4
- Number of guests subject to tourism tax: 2
- Tourism tax: 10%

Result: $100 \times 0.1 = \text{HUF } 10$ (tourism tax for the room), which is distributed between two guests subject to tourism tax (HUF 5 / person)

11.23.2. Receiving IFA data from the NTAK system

In response to an incoming scheduling request, the NTAK PMS interface will forward data to the front-office systems. The NTAK system will identify the accommodation requesting the scheduling, then will return the valid IFA values for the individual days in question, using the format detailed below. An IFA value is considered valid if it was set by the municipal government assigned to the accommodation in the NTAK Portal. In other words, the PMSs will receive valid IFA data after the function in question goes live.

```
<ns2:napiZarasUtemezesResponse xmlns:ns2="http://mtu.gov.hu/ntak/v8">
  <ns2:kertAdatok>
    <ns2:kertAdat>
      <ns2:uzenetId>824f12ff-9b3d-417e-aad9-c5948638a62b</ns2:uzenetId>
      <ns2:idoablakok>
        <ns2:idoablak>
          <ns2:kezdes>2020-09-02T22:00:00Z</ns2:kezdes>
          <ns2:veg>2020-09-03T22:00:00Z</ns2:veg>
        </ns2:idoablak>
      </ns2:idoablakok>
      <ns2:napiZarasok>
        <ns2:napiZaras>
          <ns2:targynap>2020-08-18</ns2:targynap>
          <ns2:hatalyosIfa>
            <ns2:ifaIsmert>true</ns2:ifaIsmert>
            <ns2:ifaErtek>300</ns2:ifaErtek>
            <ns2:ifaJelleg>FIX</ns2:ifaJelleg>
          </ns2:hatalyosIfa>
        </ns2:napiZaras>
        <ns2:napiZaras>
          <ns2:targynap>2020-08-17</ns2:targynap>
          <ns2:hatalyosIfa>
            <ns2:ifaIsmert>false</ns2:ifaIsmert>
            <ns2:ifaErtek xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
            <ns2:ifaJelleg xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
          </ns2:hatalyosIfa>
        </ns2:napiZaras>
      </ns2:napiZarasok>
    </ns2:kertAdat>
  </ns2:kertAdatok>
</ns2:napiZarasUtemezesResponse>
```

If the system cannot determine the IFA value for the requested accommodation (that is, the NTAK system did not receive any such value from the municipal government assigned to the

accommodation), the NTAK system will return a value of **false** in the “ifalsmert” field, and will enter “nil=true” for the “ifaErtek” and “ifaJelleg” fields.

The value sets for the “ifaErtek” and “ifaJelleg” fields are detailed in the field summary at the end of the document.

11.24. Consumption on the Check-out Date

It is possible that charges and/or spending is generated for a certain room on the check out date. Such charges and spending needs to be sent to the PMS interface using the KijelentkezesNapiErtekesites type.

Example:

[...]

```
<ntak:kijelentkezesNapiErtekesitesek>
  <ntak:ertekesitettLakoegyseg>
    <ntak:lakoegyseg>
      <ntak:epulet>Q</ntak:epulet>
      <ntak:szobaszam>367</ntak:szobaszam>
      <ntak:tipus>ECONOMY</ntak:tipus>
      <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
      <ntak:ketfosAgySzam>2</ntak:ketfosAgySzam>
      <ntak:potAgySzam>2</ntak:potAgySzam>
    </ntak:lakoegyseg>
    <ntak:ertekesitesiCsatorna>KOZVETITO_ONLINE</ntak:ertekesitesiCsatorna>
    <ntak:koltesek>
      <ntak:koltes>
        <ntak:osszeg>23800.0</ntak:osszeg>
        <ntak:koltesTipus>SZEP_KARTYA</ntak:koltesTipus>
        <ntak:koltesALTipus>VENDEGLATAS</ntak:koltesALTipus>
      </ntak:koltes>
    </ntak:koltesek>
    <ntak:terhelesek>
      <ntak:terheles>
        <ntak:osszeg>25400.0</ntak:osszeg>
        <ntak:kategoria>SZALLASDIJ</ntak:kategoria>
        <ntak:isIfa>>false</ntak:isIfa>
        <ntak:afaKulcs>
          <ntak:szazalek>27</ntak:szazalek>
        </ntak:afaKulcs>
      </ntak:terheles>
    </ntak:terhelesek>
  </ntak:ertekesitettLakoegyseg>
</ntak:kijelentkezesNapiErtekesitesek>
```

```

        </ntak:terheles>
    </ntak:terhelesek>
</ntak:ertesitettLakoegyseg>
</ntak:kijelentkezésNapiErtekesitesek>
[...]
```

11.25. Managing representational costs

Every spending that happens in the PMS software must be posted over the PMS interface. That will include any representational costs, for instance, consumption by personal guests charged to the owner's tab. If the value of such charges is HUF 0, that is how they will need to be sent to the PMS interface.

11.26. Booking IDs on the PMS Interface

Booking numbers are now a concept applicable to all PMS interface channels (Daily closure, event-driven data submission, booking data submission). The field was introduced for the purpose of linking advance booking data, daily closures and event-driven data submission by booking numbers. This means that all data submission for a given booking must contain the same booking number.

Example of a correctly linked data submission:

For daily closure

```

[...]
```

```

<ntak:ertesitettLakoegyseg>
  <ntak:lakoegyseg>
    <ntak:epulet>V.</ntak:epulet>
    <ntak:szobaszam>400</ntak:szobaszam>
    <ntak:tipus>SUPERIOR</ntak:tipus>
    <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
    <ntak:ketfosAgySzam>0</ntak:ketfosAgySzam>
    <ntak:potAgySzam>0</ntak:potAgySzam>
  </ntak:lakoegyseg>
  <ntak:ertesitesiCsatorna>DIREKT_HAGYOMANYOS</ntak:ertesitesiCsatorna>
  <ntak:piaciSzegmens>SZABADIDOS_EGYENI</ntak:piaciSzegmens>
  <ntak:foglalasiSzam>2020/00154</ntak:foglalasiSzam>
  [...]
</ntak:lakoegyseg>
</ntak:ertesitettLakoegyseg>
```

For event-driven data transmission

```
<ntak:erkezett>
  <ntak:vendegEvent>
    <ntak:idopont>2019-01-08T13:16:09Z</ntak:idopont>
    <ntak:foglalasiSzam>2020/00154</ntak:foglalasiSzam>
    <ntak:vendegek>
      <ntak:vendeg>
        <ntak:vendegId>Jg85LWFv71HXQp47CNEd20VXGh45FFx</ntak:vendegId>
        <ntak:szuletesiEv>1945</ntak:szuletesiEv>
        <ntak:nem>NO</ntak:nem>
        <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
        <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
        <ntak:lakohelyIranyitoszam>3526</ntak:lakohelyIranyitoszam>
        <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
      </ntak:vendeg>
    </ntak:vendegek>
    <ntak:lakoegyseg>
      <ntak:epulet>V.</ntak:epulet>
      <ntak:szobaszam>400</ntak:szobaszam>
      <ntak:tipus>SUPERIOR</ntak:tipus>
      <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
      <ntak:ketfosAgySzam>0</ntak:ketfosAgySzam>
      <ntak:potAgySzam>0</ntak:potAgySzam>
    </ntak:lakoegyseg>
  </ntak:vendegEvent>
</ntak:vendegEvent>
</ntak:erkezett>
```

For advance-booking data transmission

```
<ntak:foglalasEsemenyRequest xmlns:ntak="http://mtu.gov.hu/ntak/v8">
  <ntak:uzenetId>c636331b-fe63-4dea-8902-ffdb9741c68c</ntak:uzenetId>
  <ntak:szoftverVerzio>1.1</ntak:szoftverVerzio>
  <ntak:szallasAdatszolgaltatasiAzonosito>reg00001</ntak:szallasAdatszolgaltatasiAzonosito>
  <ntak:szallasNev>Teszt Szállás</ntak:szallasNev>
  <ntak:szallashelySzolgaltatoAdoszam>89998777-7-77</ntak:szallashelySzolgaltatoAdoszam>
  <ntak:szallashelySzolgaltatoNev>Teszt Szolgáltató</ntak:szallashelySzolgaltatoNev>
  <ntak:foglalasiSzam>2020/00154</ntak:foglalasiSzam>
  <ntak:esemenyLetrejotte>2020-09-03T14:05:16.327114+02:00</ntak:esemenyLetrejotte>
  <ntak:lemondva>false</ntak:lemondva>
  <ntak:foglaloAllampolgarsag>HU</ntak:foglaloAllampolgarsag>
```

<ntak:erkezes>2020-07-14</ntak:erkezes>
<ntak:tavozas>2020-07-20</ntak:tavozas>
<ntak:foglalasIdopont>2020-09-03T12:05:16.29592Z</ntak:foglalasIdopont>
<ntak:ertesitesesiCsatorna>DIREKT_HAGYOMANYOS</ntak:ertesitesesiCsatorna>
<ntak:foglalasBruttoOsszege>20000.0</ntak:foglalasBruttoOsszege>
<ntak:foglaltLakoegysegek>
 <ntak:foglaltLakoegyseg>
 <ntak:tipus>SUPERIOR</ntak:tipus>
 <ntak:ferohelyKapacitas>2</ntak:ferohelyKapacitas>
 </ntak:foglaltLakoegyseg>
</ntak:foglaltLakoegysegek>
<ntak:piaciSzegmens>SZABADIDOS_EGYENI</ntak:piaciSzegmens>
</ntak:foglalasEsemenyRequest>

12. Message elements of the PMS interface

This section will detail all data types transmitted by the PMS interface, including their types and correct formats.

The NTAK Portal's currently latest WSDL files are available at <https://info.ntak.hu/fejlesztoi-dokumentacio/>.

Generally, it is true for all fields that the use of characters forbidden in the XML structure as a standard (& < > " ') is not allowed.

Further information: <https://www.w3.org/TR/2014/REC-xml-entity-names-20140410/>

12.1. Message elements of the daily closure scheduling request

napiZarasUtemezesRequest message elements that have not been listed previously		
szoftverVerzio	String	String-type field containing the name and current version number of the PMS software. The field may not be left blank. Format: <PMS software name>: <PMS software version number> E.g.: Software name: V1.0
szallasAdatszolgaltatasiAzo nosito	String	String-type field for identifying the accommodation. Its value can be accessed in the "Adatszolgáltatási azonosító" (data provision identifier) field when editing the accommodation registered in the NTAK System.
szallasNev	String	The value of the "Szálláshely név" (Accommodation name) field registered in the NTAK system.
szallashelySzolgaltatoAdosz am	AdoszamType	Tax number of the accommodation service provider. The field verifies that the tax number entered is well-formed.
szallashelySzolgaltatoNev	String	The value of the Name / Company name field of the accommodation provider, stored in the NTAK system.

napiZarasUtemezesRequest message elements that have not been listed previously

uzenetId	UUIDType	Unique UUID-type message identifier generated by an external software.

12.2. Message elements of the daily closure scheduling

napiZarasUtemezesResponse message elements that have not been listed previously

uzenetId	UUIDType	The message ID generated by the NTAK system. The system can only accept the daily closure message sent following a daily closure scheduling request if it is accompanied by this ID.
kezdes, veg	IdoablakType	IdoablakType describes the times from and until which the NTAK System will receive the PMS software's daily closure response. Any data reporting sent outside the time interval defined by kezdes and veg is automatically rejected by the system. Dates are sent as dateTime type. Multiple idoablakTypes can be sent in one message; in such cases the PMS software may select any of the time windows for sending data.
napiZaras	NapiZarasokType	NapiZarasokType describes the accounting dates accepted by the NTAK System from the sending software. If the PMS software sends days other than the requested days, the message will be rejected . If the PMS software sends fewer days than the ones listed, the days sent will be accepted, then the missing days will be requested again in the next scheduling request in the day field. The NTAK System sends napiZaras elements to the PMS software as date type.
hatalyosIfa		The daily tourism tax data for the accommodation are submitted packaged into this object.

napiZarasUtemezesResponse message elements that have not been listed previously		
ifalsmert	Boolean	Known IFA: TRUE if the municipal government assigned to the accommodation has already set an IFA value in the NTAK system, FALSE if not.
ifaErtek		IFA value: if the value of ifalsmert is TRUE, it contains the value of IFA for the day in question, set by the municipal government and expressed in Hungarian forints or as a percentage (depending on the ifaJelleg parameter). If the value of ifalsmert is FALSE, the value of the field is nil=true.
ifaJelleg		IFA type: if the value of ifalsmert is TRUE, it contains the type of IFA for the day in question, set by the municipal government. The value can then be FIX (in which case ifaErtek is expressed in Hungarian forints) or százalékos (in which case ifaErtek is expressed as a percentage). If the value of ifalsmert is FALSE, the value of the field is nil=true.

12.3. Elements of the daily closure request

Elements of the napiZarasRequest message that were not listed previously		
napiFeltoltes	NapiFeltoltesType	A given day of the daily closure is sent packaged in this object. The NTAK system may request the submission of several days in a message, therefore this element may be included in the message multiple times.
lezartNap	Date	The field denotes the accounting date whose data are sent in the napiFeltoltes element by the PMS software.

Elements of the napiZarasRequest message that were not listed previously

lezarasIdopont	dateTime	The field describes the time and date when the actual closure of the day occurred. This date may be different from the date of the closed day.
szobaAdatok	SzobaAdatokType	The room occupancies for the accommodation are packaged into this object.
osszesSzoba	OsszesSzobaType	Total number of rooms: The total number of rooms at the accommodation in question, whether they are rentable or not. Must equal the total number of accommodation units provided during NTAK registration.
oooSzobak	SzobaType	Out-of-order rooms: The total number of rooms that are out of order in the long term for the given day (*Generally, these are rooms that are unavailable to guests due to renovations or planned capacity reductions.)
oosSzobak	SzobaType	Out-of-service rooms: The total number of rooms that are out of order in the short term for the given day (*Generally, out-of-service rooms are rentable to guests.)
kiadottSzobak	SzobaType	Rented rooms: The total number of rooms occupied by a guest on the given day. Departure and day use rooms are not included in this number.
kiadhatoSzobak	SzobaType	Rentable rooms: The total number of rooms (accommodation units) that may be occupied by guests on a given day, regardless of whether they are actually occupied by guests or not. Thus, the number of rentable rooms also includes the number of rented and out-of-service rooms.

Elements of the napiZarasRequest message that were not listed previously

lakoegysegEjszakak	LakoegysegEjszakakType	A napi fogyasztási adatok lakóegységenkénti lebontásban. / Daily consumption data broken down by accommodation units. If the szállashelyNemUzemel element is true, the lakoegysegEjszakak element cannot be included in a NapiFoltolesType type element.
nappaliHasznalat	boolean	The nappaliHasznalat field means that a certain ErtekesítettLakoegyseg was used on 'day use' basis and only during the day, i.e. the guest did not spend the night in the given accommodation unit. In case of day use, a particular ErtekesítettLakoegyseg may even be sent on the LakoegysegEjszakak list multiple times; however, it can only be sent once with the value of the nappaliHasznalat field set to false (since only a single night may be spent in a certain accommodation unit every day).
epulet	String	Part of LakoEgysegType . The building value is necessary to ensure that the building and room number pair remains a unique identifier even for accommodations where the same room numbers are used in different buildings. For a single building, a constant value should be sent.
szobaszam	String	Part of LakoEgysegType . Together with the above-mentioned building ID, it provides a unique identifier for the individual accommodation units of an accommodation.

Elements of the napiZarasRequest message that were not listed previously

tipus	LakoegysegTipusType	The accommodation unit must be categorized based on a pre-defined list. The list is available in the WSDL file of the message.
egyfosAgySzam	int	The number of single beds in the accommodation unit. Therefore if egyfosAgySzam=2, we are talking about two single beds, a total capacity of two people.
ketfosAgySzam	int	The number of double beds in the accommodation unit. Therefore if ketfosAgySzam=2, we are talking about two double beds, a total capacity of four people.
potAgySzam	int	The number of extra beds in the accommodation unit. If extra beds are not available in the accommodation unit, this field can be left empty.
ertekesitesiCsatorna	ErtekesitesiCsatornaType	The accommodation unit nights must be categorized with pre-defined sales channels. The list is available in the WSDL file of the message.
piaciSzegmens	PiaciSzegmensType	Market segment value for the night-time booking of the accommodation unit. Possible values: SZABADIDOS_EGYENI (leisure booking for individual), SZABADIDOS_CSOPORTOS (leisure booking for group), UZLETI_EGYENI (business booking for individual), UZLETI_CSOPORTOS (business booking for group), ISMERETLEN (booking with an unknown purpose)

Elements of the napiZarasRequest message that were not listed previously

foglalasiSzam	string	Booking number for the night-time booking of the accommodation unit. This booking number also needs to be included in the advance booking messages and the event-driven messages assigned to the booking number in question.
koltes	KoltesType	<p>Spending corresponding to the fee for a service. It is important to distinguish between the concepts of spending and charge.</p> <p>Spending: Spending is a gross sum paid by the guest, without the VAT rate, with the NTAK System keeping records on its total and type.</p> <p>Charge: A gross sum charged to the guest's account as payment for a service, including VAT rate and service category.</p>
osszeg	double	Gross sum of a spending (payment).
koltesTipus	KoltesTipusType	Spending by the guests should be categorized in predefined types. The list is available in the WSDL file of the message.
koltesAITipus	KoltesAITipusType	A spending type may have subtypes (e.g. hospitality subtype, leisure subtype, etc.). The subtypes can be selected from a predefined value set. If a spending type does not have a subtype, this field should be left empty.

Elements of the napiZarasRequest message that were not listed previously

terheles	TerhelesType	Charging the guest's account for a service. It is important to distinguish between the concepts of spending and charge . Spending: Spending is a gross sum paid by the guest, without the VAT rate, with the NTAK System keeping records on its total and type. Charge: A gross sum charged to the guest's account as payment for a service, including VAT rate and service category.
osszeg	double	The gross sum of a charge.
kategoria	TerhelesiTetelKategoriaType	The items charged to the guest's account can be grouped into service categories (e.g. accommodation, catering, tourism tax). The complete list is available in the WSDL file of the message.
islfa	boolean	The field describes whether tourism tax applies to the line item in question.
afaKulcs	AfaKulcsType	Per cent value of VAT applicable to the product or service.
vendegek	VendegekType	The field describes the data of guests staying at the accommodation unit.
vendegld	VendegldType	The hash generated from the guest's personal data is described in Section 10.1 - Encrypting personal data .
szuletésiEv	int	The guest's year of birth.
nem	NemType	The guest's sex.
allampolgarsagOrszagKod	OrszagKodType	The two-letter country code for the guest's nationality.
lakohelyOrszagKod	OrszagKodType	The two-letter country code for the guest's current place of residence.
lakohelylranyitoszam	string	Postal code of the guest's address.

Elements of the napiZarasRequest message that were not listed previously

ifaStatusz	IfaStatuszType	The guest's tourism tax (IFA) obligation and types of reasons for exemption. The complete list is available in the WSDL file of the message. The PMS interface contains every general tourism tax type for the country, as well as an "Other" tourism tax type. Tourism tax types introduced with municipal scope should be assigned the Other type.
uzemenKivuliSzobak	LakoegysegekType	The list of rooms not in use at the accommodation on the given day.
kijelentkezésNapiErtekesitesek	ErtekesitettLakoegysegekType	Charges and revenues created on the check-out date that can be linked to accommodation units. If the szallashelyNemUzemel element is true, the check-out NapiErtekesitesek element cannot be included in a NapiFeltoltesType type element. Important: Every room with departing guests must appear in this element, since this is the basis for the NTAK System to receive information about a departure from a room.
egyebTerhelesek	EgyebTerhelesekType	Data type summarising other charges that cannot be linked to the accommodation unit.
egyebKoltések	EgyebKoltésekType	Data type summarising other spending that cannot be linked to the accommodation unit.
tartozkodástKövetőTerhelesek	TartozkodástKövetőTerhelesekType	This type can be used to send charges recorded days or even weeks after a room has been left. Important: The room that generated the charges need not be referenced for charges after the stay has ended.

Elements of the napiZarasRequest message that were not listed previously

tartozkodastKovetoKoltesek	TartozkodastKovetoKoltesekType	This type can be used to send spending recorded days or even weeks after a room has been left. Important: The room that generated the spending does not need to be referenced for spending after the stay has ended.
osszeg	double	Sum total of other revenues.
kategoria	EgyebKoltesEsTerhelesKategoriaType	Other revenues can be grouped into pre-defined categories (e.g. catering, medical). The complete list is available in the WSDL file of the message.

12.4. Elements of the event-driven request

esemenyvezereIltAdatkuldesRequest message elements that have not been listed previously

esemenyek	EsemenyekType	Object containing event types accepted by the NTAK system.
uzenetId	UUIDType	Unique UUID-type message identifier generated by an external software.
erkezett	ErkezettType	Check-in event type.
tavozott	TavozottType	Check-out event type.
idopont	dateTime	Date and time of the guest's arrival / departure
foglalasiSzam	string	Booking number assigned to the event. This booking number also needs to be included in the advance booking messages and the ertekesitettLakoegyseg type for daily closure.

eseményvezéreltAdatkuldesRequest message elements that have not been listed previously

vendegek	VendekegType	Guests checked in / checked out. The object type is described in the daily closure elements.
lakoegyseg	LakoegysegType	The accommodation unit where the check-in / check-out occurred. The object type is described in the daily closure elements.
lakoegysegetCserelt	LakoegysegCserekType	Type of the accommodation unit change. This event is sent if the guests change room at the accommodation.
elhagyottLakoegyseg	LakoegysegType	The accommodation unit left by the guests during the change of accommodation units.
elfoglaltLakoegyseg	LakoegysegType	The accommodation unit the guests moved to during the change of accommodation units.

12.5. Example test data request message

All types appearing in the message are explained in the detail tables above.

12.6. PMS software test data response

napiZarasTesztAdatResponse message elements that have not been listed previously		
tesztUzenetId	UUIDType	The PMS software must use the value in this field for the 'uzeneteld' field in the test message.
vendegTesztAdatType	VendegTesztAdatType	Guest test data type, including personal identifiable information, from which a hash value is generated, in accordance with Section 10.2; this value must be provided in the vendegId field of the guest object to be sent in the test message.

napiZarasTesztAdatResponse message elements that have not been listed previously		
bcryptSalt	string	The salt value which must be used by the PMS software when returning the test message, to ensure that the expected value is sent to the NTAK system when encrypting personally identifiable information (Section 10.2).

12.7. PMS software test data response

All types in the message are detailed in Section 12.3 describing the daily closure message.

12.8. Booking event request

Elements of FoglalasEsemenyRequest message		
szoftverVerzio	String	String-type field containing the name and current version number of the PMS software. The field may not be left blank. Format: <PMS software name>: <PMS software version number> E.g.: Software name: V1.0

Elements of FoglalasEsemenyRequest message

szallasAdatszolgaltatasiAzonosito	String	String-type field for identifying the accommodation. Its value can be accessed in the “ <i>Adatszolgáltatási azonosító</i> ” (data provision identifier) field when editing the accommodation registered in the NTAK System.
szallasNev	string	The value of the “ <i>Szálláshely név</i> ” (<i>Accommodation name</i>) field registered in the NTAK system.
szallashelySzolgaltatoAdoszam	AdoszamType	Tax number of the accommodation service provider. Format: TTTTTTTT-A-BB The field verifies that the tax number entered is well-formed.
szallashelySzolgaltatoNev	String	The value of the Name / Company name field of the accommodation provider, stored in the NTAK system.
foglalasiSzam	String	Unique field at accommodation level, used for identifying a booking. If it refers to an existing reservation, the stored booking is updated on the basis of the transmitted data . If no such booking reference yet exists for the given accommodation, a new booking is saved.

Elements of FoglalasEsemenyRequest message

esemenyLetrejtotte	dateTime	The field denotes the exact time and date when the booking event occurred. Events mapped to a single booking are sorted by time on the basis of this field. (In case multiple modifications are received for an event, this date will be decisive as to which version is the latest.)
Lemondva	boolean	Describes whether the given booking has been cancelled. If True, the booking will be registered with cancelled status. If False, the booking will be considered active.
FoglaloAllampolgarsag	OrszagKodType	The two-letter ISO country code for the citizenship of the person who made the booking.
Erkezes	date	Expected date of arrival.
Tavozas	date	Expected date of departure.
FoglalasIdopont	dateTime	Date of booking.
ertesitesiCsatorna	ErtesitesiCsatornaType	The accommodation unit nights must be categorized with pre-defined sales channels: DIREKT_ONLINE DIREKT_HAGYOMANYOS KOZVETITO_ONLINE KOZVETITO_HAGYOMANYOS
FoglalasBruttoOsszege	double	Total booking amount including taxes, expressed as HUF.
FoglaltLakoegyseg	FoglaltLakoegysegekType	List of booked rooms. (XML root element.)
FoglaltLakoegyseg	FoglaltLakoegysegType	Descriptor for a certain booked accommodation unit (repeatable root element).

Elements of FoglalasEsemenyRequest message

Elements of FoglalasEsemenyRequest message		
tipus	LakoegysegTipusType	The accommodation unit must be categorized based on a pre-defined list. The list is available in the WSDL file of the message.
ferohelyKapasitas	int	Accommodation unit capacity without extra beds.
piaciSzegmens	PiaciSzegmensType	Market segment value for the booking. Possible values: SZABADIDOS_EGYENI (leisure booking for individual), SZABADIDOS_CSOPORTOS (leisure booking for group), UZLETI_EGYENI (business booking for individual), UZLETI_CSOPORTOS (business booking for group), ISMERETLEN (booking with an unknown purpose)
vendegszam	double	Number of guests: The expected number of guests for the booking. A whole number between 1-1000. Optional field.

13.Data transmission example

The data transmission example below was written in Java, and uses Spring web services and Spring boot dependencies. Code sections **cannot be run independently**, the section is intended to explain data transmission settings through a practical example. To minimise the example complexity, event-driven data transmission will be described.

13.1. Configurations



Webservice konfiguráció

13.2. Web service client configuration



Webservice kliens kialakítása

13.3. Sending event-driven messages



Eseményvezérelt üzenet küldése

14. Appendices

The “Mellékletek” (Appendices) folder attached to the documentation contains the WSDL files for the NTAK system logic described above.

14.1. Requesting Certificates

The section below presents an example of how command-line tools can be used to generate a certificate request.

14.1.1. Standards and Recommendations

The following table summarises the list of standards and recommendations referenced in this document.

Keyword	
RFC 5280 X.509 CRL	Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile https://www.ietf.org/rfc/rfc5280.txt
RFC 6818 X.509 CRL	Updates to the Internet X.509 Public Key Infrastructure Certificate and Certificate Revocation List (CRL) Profile https://tools.ietf.org/html/rfc6818
RFC 6960 OCSP	X.509 Internet Public Key Infrastructure Online Certificate Status Protocol (OCSP) https://tools.ietf.org/html/rfc6960
RFC 2986 PKCS#10	PKCS #10: Certification Request Syntax Specification Version 1.7 https://tools.ietf.org/html/rfc2986

14.1.2. Example for creating an accommodation certificate request in Windows environment

A certificate request can be created for testing purposes in Windows operating system environment from the command line, using the **certreq** utility

https://docs.microsoft.com/en-us/windows-server/administration/windows-commands/certreq_1

14.1.2.1. Creating a test authentication certificate request

A configuration file similar to the one below will need to be created for the authentication certificate request example

```
;
; SampleAuthentication.ini
; Content of CSR file for test authentication certificate
```

```

;
[NewRequest]
Subject = "CN=12345678, O=Virág Panzió, 2.5.4.97=12345678, 2.5.4.17=3325, L=Noszvaj, C=HU"
FriendlyName = "Virág Panzió Autentikációs Tanúsítvány"
KeySpec = 1
KeyLength = 4096
KeyUsage = 0x80
HashAlgorithm = SHA256
KeyAlgorithm = RSA
Exportable = TRUE
MachineKeySet = TRUE
SMIME = FALSE
PrivateKeyArchive = FALSE
UserProtected = FALSE
UseExistingKeySet = FALSE
ProviderName = "Microsoft Enhanced RSA and AES Cryptographic Provider"
ProviderType = 24
RequestType = PKCS10

[EnhancedKeyUsageExtension]
OID=1.3.6.1.5.5.7.3.2

```

It is important to note that the `Exportable=TRUE` parameter in the above example's configuration file makes it possible to move the generated key-pair to another computer, and that based on the `MachineKeySet=TRUE` parameter, the key-pair is created in the computer's certificate repository, which is also where the issued certificate will need to be loaded.

Creating the certificate request from the command line is as follows:

```
CertReq -New SampleAuthentication.ini SampleAuthentication.csr
```

14.1.2.2. Creating a test signature certificate request

A configuration file similar to the one below needs to be created for the signature certificate request example

```

;
; SampleSigning.ini
; Content of CSR file for test signature certificate
;
[NewRequest]
Subject = "CN=12345678, O=Virág Panzió, 2.5.4.97=12345678, 2.5.4.17=3325, L=Noszvaj, C=HU"
FriendlyName = "Virág Panzió Aláírói Tanúsítvány"

```

```
KeySpec = 1
KeyLength = 4096
KeyUsage = 0xC0
HashAlgorithm = SHA256
KeyAlgorithm = RSA
Exportable = TRUE
MachineKeySet = TRUE
SMIME = FALSE
PrivateKeyArchive = FALSE
UserProtected = FALSE
UseExistingKeySet = FALSE
ProviderName = "Microsoft Enhanced RSA and AES Cryptographic Provider"
ProviderType = 24
RequestType = PKCS10
```

It is important to note that the `Exportable=TRUE` parameter in the above example's configuration file makes it possible to move the generated key-pair to another computer, and that based on the `MachineKeySet=TRUE` parameter, the key-pair is created in the computer's certificate repository, which is also where the issued certificate will need to be loaded.

Creating the certificate request from the command line is as follows:

```
CertReq -New SampleSigning.ini SampleSigning.csr
```

14.1.3. Example for creating an accommodation certificate request in Linux environment

A certificate request can be created for testing purposes in Linux operating system environment from the command line, using the **openssl** utility

<https://www.openssl.org/docs/manmaster/man1/openssl.html>

14.1.3.1. Creating a test authentication certificate request

A configuration file similar to the one below will need to be created for the authentication certificate request example

```
;  
; SampleAuthentication.conf  
; Content of CSR file for test authentication certificate  
;  
[ req ]  
default_bits = 4096
```

```

default_md      = sha256
prompt         = no
encrypt_key    = no
distinguished_name = req_distinguished_name
req_extensions  = req_extensions

[ req_distinguished_name ]
CN              = 12345678
O              = Vadvirág Panzió
OID.2.5.4.97   = VATHU-12345678-2-43
OID.2.5.4.17   = 3325
L              = Noszvaj
C              = HU

[ req_extensions ]
keyUsage       = digitalSignature
extendedKeyUsage = clientAuth

```

Creating the certificate request from the command line is as follows:

```

openssl req -newkey rsa:4096 -keyout SampleAuthentication.key -config
SampleAuthentication.conf -out SampleAuthentication.csr

```

The correctness of data in the certificate request file can be checked with the help of the following command

```

openssl req -in SampleAuthentication.csr -noout -text

```

14.1.3.2. Creating a test signature certificate request

A configuration file similar to the one below needs to be created for the signature certificate request example

```

;
; SampleSigning.conf
; Content of CSR file for test signature certificate
;
[ req ]
default_bits      = 4096
default_md       = sha256
prompt          = no

```

```

encrypt_key          = no
distinguished_name = req_distinguished_name
req_extensions       = req_extensions

[ req_distinguished_name ]
CN                   = 12345678
O                    = Vadvirág Panzió
OID.2.5.4.97         = VATHU-12345678-2-43
OID.2.5.4.17         = 3325
L                    = Noszvaj
C                    = HU

[ req_extensions ]
keyUsage             = nonRepudiation, digitalSignature

```

Creating the certificate request from the command line is as follows:

```

openssl req -newkey rsa:4096 -keyout SampleSigning.key -config SampleSigning.conf -out
SampleSigning.csr

```

The correctness of data in the certificate request file can be checked with the help of the following command

```

openssl req -in SampleSigning.csr -noout -text

```

14.2. Examples for the scheduling endpoint

14.2.1. Example daily closure scheduling request

```

<soapenv:Envelope xmlns:ntak="http://mtu.gov.hu/ntak/v8"
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:napiZarasUtemezesRequest>
      <ntak:szoftverVerzio>SzoftverNév: V1.0</ntak:szoftverVerzio>
      <ntak:szallashely>
        <ntak:szallasAdatszolgaltatasiAzonosito>AB123DH2</ntak:szallasAdatszolgaltatasiAzonosito>
        <ntak:szallasNev>Egy hotel</ntak:szallasNev>
        <ntak:szallashelySzolgaltatoAdoszam>
          01234567-0-01
        </ntak:szallashelySzolgaltatoAdoszam>
      </ntak:szallashely>
    </ntak:napiZarasUtemezesRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

```

        </ntak:szallashelySzolgáltatoAdoszam>
        <ntak:szallashelySzolgáltatoNev>
            Egy hotel szolgáltató BT
        </ntak:szallashelySzolgáltatoNev>
    </ntak:szallashely>
</ntak:napiZarasUtemezesRequest>
</soapenv:Body>
</soapenv:Envelope>

```

Example of a response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <ns2:napiZarasUtemezesResponse xmlns:ns2="http://mtu.gov.hu/ntak/v8">
      <ns2:kertAdatok>
        <ns2:kertAdat>
          <ns2:uzenetId>824f12ff-9b3d-417e-aad9-c5948638a62b</ns2:uzenetId>
          <ns2:idoablakok>
            <ns2:idoablak>
              <ns2:kezdes>2020-09-02T22:00:00Z</ns2:kezdes>
              <ns2:veg>2020-09-03T22:00:00Z</ns2:veg>
            </ns2:idoablak>
          </ns2:idoablakok>
          <ns2:napiZarasok>
            <ns2:napiZaras>
              <ns2:targynap>2020-08-18</ns2:targynap>
              <ns2:hatalyosIfa>
                <ns2:ifaIsmert>true</ns2:ifaIsmert>
                <ns2:ifaErtek>300</ns2:ifaErtek>
                <ns2:ifaJelleg>FIX</ns2:ifaJelleg>
              </ns2:hatalyosIfa>
            </ns2:napiZaras>
            <ns2:napiZaras>
              <ns2:targynap>2020-08-11</ns2:targynap>
              <ns2:hatalyosIfa>
                <ns2:ifaIsmert>false</ns2:ifaIsmert>
                <ns2:ifaErtek xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
                <ns2:ifaJelleg xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"/>
              </ns2:hatalyosIfa>
            </ns2:napiZaras>
          </ns2:napiZarasok>
        </ns2:kertAdat>
      </ns2:kertAdatok>
    </ns2:napiZarasUtemezesResponse>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

```

    </ns2:napiZarasok>
  </ns2:kertAdat>
</ns2:kertAdatok>
</ns2:napiZarasUtemezesResponse>
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

14.3. Daily closure

14.3.1. Example of a request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ntak="http://mtu.gov.hu/ntak/v8">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:napiZarasRequest>
      <ntak:uzenetId>8ae7e234-4767-452b-b7ff-f262029930d8</ntak:uzenetId>
      <ntak:szoftverVerzio>v1.1.1</ntak:szoftverVerzio>
      <ntak:szallashely>
        <ntak:szallasAdatszolgáltatasiAzonosito>cert0001</ntak:szallasAdatszolgáltatasiAzonosito>
        <ntak:szallasNev>PMS interfész szállás 3</ntak:szallasNev>
        <ntak:szallashelySzolgáltatoAdoszam>99999935-2-12</ntak:szallashelySzolgáltatoAdoszam>
        <ntak:szallashelySzolgáltatoNev>PMS hotel szolgáltato</ntak:szallashelySzolgáltatoNev>
      </ntak:szallashely>
      <ntak:napiFeltoltesek>
        <!--1 or more repetitions:-->
        <ntak:napiFeltoltes>
          <!--napiZarasUtemezesResponse-bol-->
          <ntak:lezartNap>2019-07-30</ntak:lezartNap>
          <!--napiZarasUtemezesResponse-bol-->
          <ntak:lezarasIdopont>2019-10-01T10:00:00Z</ntak:lezarasIdopont>
          <ntak:szobaAdatok>
            <ntak:osszesSzoba>5</ntak:osszesSzoba>
            <ntak:oooSzobak>2</ntak:oooSzobak>
            <ntak:oosSzobak>0</ntak:oosSzobak>
            <ntak:kiadottSzobak>1</ntak:kiadottSzobak>
            <ntak:kiadhatoSzobak>3</ntak:kiadhatoSzobak >
          </ntak:szobaAdatok>
          <ntak:lakoegysegEjszakak>
            <ntak:lakoegysegEjszaka>

```



```
<ntak:ertekesítettLakoegyseg>
  <ntak:lakoegyseg>
    <ntak:epulet>V.</ntak:epulet>
    <ntak:szobaszam>489</ntak:szobaszam>
    <ntak:tipus>PRIVAT_SZOBA_KOZOS_FURDOVEL</ntak:tipus>
    <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
    <ntak:ketfosAgySzam>2</ntak:ketfosAgySzam>
    <ntak:potAgySzam>0</ntak:potAgySzam>
  </ntak:lakoegyseg>
  <ntak:ertekesitesiCsatorna>DIREKT_HAGYOMANYOS</ntak:ertekesitesiCsatorna>
  <ntak:piaciSzegmens>SZABADIDOS_EGYENI</ntak:piaciSzegmens>
  <ntak:foglalasiSzam>2020/00154</ntak:foglalasiSzam>
  <ntak:koltesek>
    <ntak:koltes>
      <ntak:osszeg>24200.0</ntak:osszeg>
      <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
    </ntak:koltes>
  </ntak:koltesek>
  <ntak:terhelesek>
    <ntak:terheles>
      <ntak:osszeg>1260.0</ntak:osszeg>
      <ntak:kategoria>IFA</ntak:kategoria>
      <ntak:isIfa>true</ntak:isIfa>
      <ntak:afaKulcs>
        <ntak:szazalek>18</ntak:szazalek>
      </ntak:afaKulcs>
    </ntak:terheles>
  </ntak:terhelesek>
</ntak:ertekesítettLakoegyseg>
<ntak:vendegek>
  <ntak:vendeg>
    <ntak:vendegId>Gb37WNHu65PHNy59TIIu21CWwz40XBn</ntak:vendegId>
    <ntak:szulesesiEv>1983</ntak:szulesesiEv>
    <ntak:nem>NO</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>8477</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
  </ntak:vendeg>
</ntak:vendegek>
```

<ntak:nappaliHasznalat>>false</ntak:nappaliHasznalat>
</ntak:lakoegysegEjszaka>
</ntak:lakoegysegEjszakak>
<ntak:uzemenKivuliSzobak>
<ntak:lakoegyseg>
<ntak:epulet>T</ntak:epulet>
<ntak:szobaszam>239</ntak:szobaszam>
<ntak:tipus>APARTMAN</ntak:tipus>
<ntak:egyfosAgySzam>4</ntak:egyfosAgySzam>
<ntak:ketfosAgySzam>4</ntak:ketfosAgySzam>
<ntak:potAgySzam>0</ntak:potAgySzam>
</ntak:lakoegyseg>
</ntak:uzemenKivuliSzobak>
<ntak:kijelentkezesNapiErtekesitesek>
<ntak:ertekesitettLakoegyseg>
<ntak:lakoegyseg>
<ntak:epulet>Q</ntak:epulet>
<ntak:szobaszam>367</ntak:szobaszam>
<ntak:tipus>JUNIOR_SUITE</ntak:tipus>
<ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
<ntak:ketfosAgySzam>2</ntak:ketfosAgySzam>
<ntak:potAgySzam>2</ntak:potAgySzam>
</ntak:lakoegyseg>
<ntak:ertekesitesiCsatorna>DIREKT_ONLINE</ntak:ertekesitesiCsatorna>
<ntak:piaciSzegmens>UZLETI_EGYENI</ntak:piaciSzegmens>
<ntak:foglalasiSzam>2020/00153</ntak:foglalasiSzam>
<ntak:koltesek>
<ntak:koltes>
<ntak:osszeg>23800.0</ntak:osszeg>
<ntak:koltesTipus>SZEP_KARTYA</ntak:koltesTipus>
<ntak:koltesALTipus>VENDEGLATAS</ntak:koltesALTipus>
</ntak:koltes>
</ntak:koltesek>
<ntak:terhelesek>
<ntak:terheles>
<ntak:osszeg>25400.0</ntak:osszeg>
<ntak:kategoria>SZALLASDIJ</ntak:kategoria>
<ntak:isIfa>>false</ntak:isIfa>
<ntak:afaKulcs>
<ntak:szazalek>27</ntak:szazalek>

```

        </ntak:afaKulcs>
    </ntak:terheles>
</ntak:terhelesek>
</ntak:ertekesítettLakoegyseg>
</ntak:kijelentkezésNapiErtekesitesek>
<ntak:egyebTerhelesek>
    <ntak:egyebTerheles>
        <ntak:osszeg>1800.0</ntak:osszeg>
        <ntak:kategoria>WELLNESS_SZOLGALTATAS</ntak:kategoria>
        <ntak:afaKulcs>
            <ntak:szazalek>18</ntak:szazalek>
        </ntak:afaKulcs>
    </ntak:egyebTerheles>
</ntak:egyebTerhelesek>
<ntak:egyebKoltések>
    <ntak:egyebKoltés>
        <ntak:osszeg>4300.0</ntak:osszeg>
        <ntak:koltésTipus>SZEP_KARTYA</ntak:koltésTipus>
        <ntak:koltésAltípus>VENDEGLATAS</ntak:koltésAltípus>
    </ntak:egyebKoltés>
</ntak:egyebKoltések>
<ntak:tartozkodástKovetoKoltések>
    <ntak:tartozkodástKovetoKoltés>
        <ntak:datum>2001-01-31T08:04:09Z</ntak:datum>
        <ntak:koltés>
            <ntak:osszeg>24800.0</ntak:osszeg>
            <ntak:koltésTipus>BANKKARTYA</ntak:koltésTipus>
        </ntak:koltés>
    </ntak:tartozkodástKovetoKoltés>
</ntak:tartozkodástKovetoKoltések>
<ntak:tartozkodástKovetoTerhelesek>
    <ntak:tartozkodástKovetoTerheles>
        <ntak:datum>2001-01-31T08:01:09Z</ntak:datum>
        <ntak:terheles>
            <ntak:osszeg>1260.0</ntak:osszeg>
            <ntak:kategoria>IFA</ntak:kategoria>
            <ntak:isIfa>true</ntak:isIfa>
            <ntak:afaKulcs>
                <ntak:szazalek>18</ntak:szazalek>
            </ntak:afaKulcs>
        </ntak:terheles>
    </ntak:tartozkodástKovetoTerheles>
</ntak:tartozkodástKovetoTerhelesek>

```

```

        </ntak:terheles>
    </ntak:tartozkodastKovetoTerheles>
</ntak:tartozkodastKovetoTerhelesek>
</ntak:napiFeltoltes>
</ntak:napiFeltoltesek>
</ntak:napiZarasRequest>
</soapenv:Body>
</soapenv:Envelope>

```

14.3.2. Example of a response

If the message is correct, the server responds with an HTTP 200 OK response to the HTTPS query. In any other cases, it sends an error message, similar to the following sample SOAP message, describing the error found during validation.

14.4. Daily closure test message (Only for interface version V7)

14.4.1. Example of a test data request

```

<soapenv:Envelope xmlns:ntak="http://mtu.gov.hu/ntak/v7"
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:napiZarasTesztAdatRequest>
      <szoftverVerzio>SzoftverNév: v1.1.0</szoftverVerzio>
      <ntak:szallashely>
        <ntak:szallasRegisztraciosSzam>AB123DH2</ntak:szallasRegisztraciosSzam>
        <szallasNev>Fotel Hotel</szallasNev>
        <szallashelySzolgáltatoAdoszam>989998977</szallashelySzolgáltatoAdoszam>
        <szallashelySzolgáltatoNev>Fotel Hotel Bt.</szallashelySzolgáltatoNev>
      </ntak:szallashely>
    </ntak:napiZarasTesztAdatRequest>
  </soapenv:Body>
</soapenv:Envelope>

```

14.4.2. Example of a response to a test data request

```

<soapenv:Envelope xmlns:ntak="http://mtu.gov.hu/ntak/v7"
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:napiZarasTesztAdatResponse>

```

<ntak:tesztUzenetId>5a97cdb3-83d5-4875-a811-cbc42d4196c4</ntak:tesztUzenetId>
<ntak:bcryptSalt>zDaBMMumxc/1rLNjHHg550</ntak:bcryptSalt>
<ntak:lezartNap>2002-09-24</ntak:lezartNap>
<ntak:lezarasIdopont>2018-09-12T11:31:00Z</ntak:lezarasIdopont>
<ntak:lakoegysegEjszakaTesztAdat>
 <ntak:ertekesitettLakoegyseg>
 <ntak:lakoegyseg>
 <ntak:epulet>A epulet</ntak:epulet>
 <ntak:szobaszam>321</ntak:szobaszam>
 <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
 <ntak:ketfosAgySzam>1</ntak:ketfosAgySzam>
 <ntak:tipus>SUPERIOR</ntak:tipus>
 </ntak:lakoegyseg>
 <ntak:ertekesitesiCsatorna>
 KOZVETITO_ONLINE</ntak:ertekesitesiCsatorna>
 <ntak:koltsek>
 <ntak:koltes>
 <ntak:osszeg>9876</ntak:osszeg>
 <ntak:koltesTipus>SZEP_KARTYA</ntak:koltesTipus>
 <ntak:koltesAltTipus>VENDEGLATAS</ntak:koltesAltTipus>
 </ntak:koltes>
 </ntak:koltsek>
 <ntak:terhelesek>
 <ntak:terheles>
 <ntak:osszeg>9876</ntak:osszeg>
 <ntak:kategoria>ETKEZES_VACSORA</ntak:kategoria>
 <ntak:isIfa>>false</ntak:isIfa>
 </ntak:terheles>
 </ntak:terhelesek>
</ntak:ertekesitettLakoegyseg>
<ntak:vendegek></ntak:vendegek>
<ntak:tesztVendegek>
 <ntak:tesztVendegAdat>
 <ntak:nev>Ablakné Üveges Zsuzsanna</ntak:nev>
 <ntak:szulesesiCsaladiNev>Üveges</ntak:szulesesiCsaladiNev>
 <ntak:szulesesiUtoNevek>Zsuzsanna</ntak:szulesesiUtoNevek>
 <ntak:szulesesiHely>Budapest</ntak:szulesesiHely>
 <ntak:szulesesiIdo>1970-01-01</ntak:szulesesiIdo>
 <ntak:anyjaSzulesesiCsaladiNeve>Gipsz</ntak:anyjaSzulesesiCsaladiNeve>
 <ntak:anyjaSzulesesiUtoNevei>Julianna</ntak:anyjaSzulesesiUtoNevei>

```

    <ntak:nem>NO</ntak:nem>

    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>

    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>

    <ntak:lakohelyIranyitoszam>6704</ntak:lakohelyIranyitoszam>

    <ntak:ifaStatusz>MENTES_HOZZATARTOZO</ntak:ifaStatusz>

  </ntak:tesztVendegAdat>
</ntak:tesztVendegek>

</ntak:lakoegysegEjszakaTesztAdat>
</ntak:napiZarasTesztAdatResponse>
</soapenv:Body>
</soapenv:Envelope>

```

14.4.3. Example test message sending (Only for interface version V7)

```

<soapenv:Envelope xmlns:ntak="http://mtu.gov.hu/ntak/v7"
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:napiZarasTesztRequest>
      <ntak:tesztUzenetId>82aa1b7f-f877-4929-9994-379c213f2a28</ntak:tesztUzenetId>
      <ntak:szoftverVerzio>SzoftverNév: v1.1.0</ntak:szoftverVerzio>
      <ntak:szallashely>
        <ntak:szallasRegisztraciosSzam>
          AB123DH2
        </ntak:szallasRegisztraciosSzam>
        <ntak:szallasNev>Egy hotel</ntak:szallasNev>
        <ntak:szallashelySzolgáltatoAdoszam>
          01234567-0-01
        </ntak:szallashelySzolgáltatoAdoszam>
        <ntak:szallashelySzolgáltatoNev>
          Egy hotel szolgáltató BT
        </ntak:szallashelySzolgáltatoNev>
      </ntak:szallashely>
    <ntak:napiFeltoltes>
      <ntak:lezartNap>2018-10-11</ntak:lezartNap>
      <ntak:lezarasIdopont>2018-10-11T16:29:18Z</ntak:lezarasIdopont>
      <ntak:lakoegysegEjszakak>
        <!--Zero or more repetitions:-->
        <ntak:lakoegysegEjszaka>
          <ntak:ertekesitettLakoegyseg>

```

```

<ntak:lakoegyseg>
  <ntak:epulet>Kastély</ntak:epulet>
  <ntak:szobaszam>101</ntak:szobaszam>
  <ntak:tipus>ECONOMY</ntak:tipus>
  <ntak:egyfosAgySzam>1</ntak:egyfosAgySzam>
  <ntak:ketfosAgySzam>2</ntak:ketfosAgySzam>
  <ntak:potAgySzam>3</ntak:potAgySzam>
</ntak:lakoegyseg>
<ntak:ertekezesiCsatorna>DIREKT_ONLINE</ntak:ertekezesiCsatorna>
<ntak:koltesek>
  <ntak:koltes>
    <ntak:osszeg>3500.0</ntak:osszeg>
    <ntak:koltesTipus>BANKKARTYA</ntak:koltesTipus>
  </ntak:koltes>
  <ntak:koltes>
    <ntak:osszeg>2000.0</ntak:osszeg>
    <ntak:koltesTipus>SZEP_KARTYA</ntak:koltesTipus>
    <ntak:koltesAlTipus>VENDEGLATAS</ntak:koltesAlTipus>
  </ntak:koltes>
</ntak:koltesek>
<ntak:terhelesek>
  <ntak:terheles>
    <ntak:osszeg>5500.0</ntak:osszeg>
    <ntak:kategoria>SZALLASDIJ</ntak:kategoria>
  </ntak:terheles>
</ntak:terhelesek>
</ntak:ertekesítettLakoegyseg>
<ntak:vendegek>
  <!--Zero or more repetitions:-->
  <ntak:vendeg>
    <ntak:vendegId>dckcas1anc9N3vIAS4gKh0iydUOEvre</ntak:vendegId>
    <ntak:szuletésiEv>1969</ntak:szuletésiEv>
    <ntak:nem>FERFI</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>6726</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>MENTES_EGYHAZ</ntak:ifaStatusz>
  </ntak:vendeg>
</ntak:vendegek>
  <ntak:nappaliHasznalat>false</ntak:nappaliHasznalat>

```

```

    </ntak:lakoegysegEjszaka>
</ntak:lakoegysegEjszakak>
<ntak:uzemenKivuliSzobak>
  <!--Zero or more repetitions!-->
</ntak:uzemenKivuliSzobak>
<ntak:kijelentkezésNapiErtekesitesek/>
<ntak:egyebTerhelesek/>
<ntak:egyebKoltések/>
<ntak:tartozkodastKovetoKoltések/>
<ntak:tartozkodastKovetoTerhelesek/>
</ntak:napiFeltoltes>
</ntak:napiZarasTesztRequest>
</soapenv:Body>
</soapenv:Envelope>

```

14.4.4. Sample response to test message

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns="http://mtu.hu/ntak/schema/tesztuzenet">
  <soapenv:Header/>
  <soapenv:Body>
    <napiZarasTesztResponse>
      <tesztUzenetIdopont>2018-09-05T19:32:52Z</tesztUzenetIdopont>
      <sikeres>true</sikeres>
    </napiZarasTesztResponse>
  </soapenv:Body>
</soapenv:Envelope>

```

14.5. Event-driven communication

14.5.1. Example of a request

```

<soapenv:Envelope xmlns:ntak="http://mtu.gov.hu/ntak/v8" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:esemenyvezereltAdatkuldesRequest>
      <ntak:uzenetId>02355359-fc89-4bd1-a5c7-b0ac20400b18</ntak:uzenetId>
      <ntak:szoftverVerzio>v1.1.1</ntak:szoftverVerzio>
      <ntak:szallashely>
        <ntak:szallasAdatszolgáltatasiAzonosito>cert0001</ntak:szallasAdatszolgáltatasiAzonosito>
        <ntak:szallasNev>PMS interfész szállás 3</ntak:szallasNev>
      </ntak:szallashely>
    </ntak:esemenyvezereltAdatkuldesRequest>
  </soapenv:Body>
</soapenv:Envelope>

```



```

<ntak:szallashelySzolgáltatoAdoszam>12345672-9-03</ntak:szallashelySzolgáltatoAdoszam>
<ntak:szallashelySzolgáltatoNev>PMS hotel szolgáltato</ntak:szallashelySzolgáltatoNev>
</ntak:szallashely>
<ntak:esemenyek>
  <ntak:erkezett>
    <ntak:vendegEvent>
      <ntak:idopont>2019-01-08T13:16:09Z</ntak:idopont>
      <ntak:foglalasiSzam>2020/00154</ntak:foglalasiSzam>
      <ntak:vendegek>
        <ntak:vendeg>
          <ntak:vendegId>Jg85LWFv71HXQp47CNEd20VXGh45FFx</ntak:vendegId>
          <ntak:szulesesiEv>1945</ntak:szulesesiEv>
          <ntak:nem>NO</ntak:nem>
          <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
          <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
          <ntak:lakohelyIranyitoszam>3526</ntak:lakohelyIranyitoszam>
          <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
        </ntak:vendeg>
        <ntak:vendeg>
          <ntak:vendegId>Uw52FUHc98ZUKn46CDSv59KBFw53RQc</ntak:vendegId>
          <ntak:szulesesiEv>1986</ntak:szulesesiEv>
          <ntak:nem>NO</ntak:nem>
          <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
          <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
          <ntak:lakohelyIranyitoszam>7751</ntak:lakohelyIranyitoszam>
          <ntak:ifaStatusz>im7</ntak:ifaStatusz>
        </ntak:vendeg>
        <ntak:vendeg>
          <ntak:vendegId>Bk34EKEe53DA0j38JNXa20KXZd22YRi</ntak:vendegId>
          <ntak:szulesesiEv>1978</ntak:szulesesiEv>
          <ntak:nem>FERFI</ntak:nem>
          <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
          <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
          <ntak:lakohelyIranyitoszam>9636</ntak:lakohelyIranyitoszam>
          <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
        </ntak:vendeg>
      </ntak:vendegek>
    <ntak:lakoegyseg>
      <ntak:epulet>I</ntak:epulet>
      <ntak:szobaszam>143</ntak:szobaszam>
    </ntak:lakoegyseg>
  </ntak:erkezett>
</ntak:esemenyek>

```

```

    <ntak:tipus>SUPERIOR</ntak:tipus>
    <ntak:egyfosAgySzam>1</ntak:egyfosAgySzam>
    <ntak:ketfosAgySzam>1</ntak:ketfosAgySzam>
    <ntak:potAgySzam>2</ntak:potAgySzam>
  </ntak:lakoegyseg>
</ntak:vendegEvent>
<ntak:vendegEvent>
  <ntak:idopont>2019-01-08T13:16:09Z</ntak:idopont>
  <ntak:foglalasiSzam>2020/00153</ntak:foglalasiSzam>
  <ntak:vendegek>
    <ntak:vendeg>
      <ntak:vendegId>Uy84HMQb14KQRq73ABCf87IQVi87FHz</ntak:vendegId>
      <ntak:szuletesiEv>1925</ntak:szuletesiEv>
      <ntak:nem>NO</ntak:nem>
      <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
      <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
      <ntak:lakohelyIranyitoszam>2315</ntak:lakohelyIranyitoszam>
      <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
    </ntak:vendeg>
    <ntak:vendeg>
      <ntak:vendegId>Ds34FRXc94YWXp64PZYd50NYEi43BJf</ntak:vendegId>
      <ntak:szuletesiEv>1952</ntak:szuletesiEv>
      <ntak:nem>NO</ntak:nem>
      <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
      <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
      <ntak:lakohelyIranyitoszam>4566</ntak:lakohelyIranyitoszam>
      <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
    </ntak:vendeg>
  </ntak:vendegek>
</ntak:lakoegyseg>
  <ntak:epulet>H</ntak:epulet>
  <ntak:szobaszam>155</ntak:szobaszam>
  <ntak:tipus>STANDARD</ntak:tipus>
  <ntak:egyfosAgySzam>0</ntak:egyfosAgySzam>
  <ntak:ketfosAgySzam>1</ntak:ketfosAgySzam>
  <ntak:potAgySzam>1</ntak:potAgySzam>
</ntak:lakoegyseg>
</ntak:vendegEvent>
<ntak:vendegEvent>
  <ntak:idopont>2019-01-08T13:16:09Z</ntak:idopont>

```

```
<ntak:foglalasiSzam>2020/00152</ntak:foglalasiSzam>
<ntak:vendegek>
  <ntak:vendeg>
    <ntak:vendegId>Eo29UUB178IUQi87UNGx13XZCv44KUj</ntak:vendegId>
    <ntak:szuletésiEv>1951</ntak:szuletésiEv>
    <ntak:nem>NO</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>3354</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
  </ntak:vendeg>
  <ntak:vendeg>
    <ntak:vendegId>Qc06NELe89PKGj24BDNk28CCRm08QU1</ntak:vendegId>
    <ntak:szuletésiEv>1957</ntak:szuletésiEv>
    <ntak:nem>NO</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>4943</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
  </ntak:vendeg>
  <ntak:vendeg>
    <ntak:vendegId>Hy98AMQj98LJZo28ZMCy68YWBj88HXi</ntak:vendegId>
    <ntak:szuletésiEv>1925</ntak:szuletésiEv>
    <ntak:nem>FERFI</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>3328</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
  </ntak:vendeg>
  <ntak:vendeg>
    <ntak:vendegId>Dz41VQAw77EYGF62EZLw89UONk96MS<</ntak:vendegId>
    <ntak:szuletésiEv>2003</ntak:szuletésiEv>
    <ntak:nem>NO</ntak:nem>
    <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
    <ntak:lakohelyIranyitoszam>2672</ntak:lakohelyIranyitoszam>
    <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
  </ntak:vendeg>
</ntak:vendegek>
<ntak:lakoegyseg>
```

```
<ntak:epulet>H</ntak:epulet>
<ntak:szobaszam>94</ntak:szobaszam>
<ntak:tipus>JUNIOR_SUITE</ntak:tipus>
<ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
<ntak:ketfosAgySzam>2</ntak:ketfosAgySzam>
<ntak:potAgySzam>1</ntak:potAgySzam>
</ntak:lakoegyseg>
</ntak:vendegEvent>
<ntak:vendegEvent>
  <ntak:idopont>2019-01-08T13:16:09Z</ntak:idopont>
  <ntak:foglalasiSzam>2020/00151</ntak:foglalasiSzam>
  <ntak:vendegek>
    <ntak:vendeg>
      <ntak:vendegId>01670QAd46BHSt370BA190CTQv05RLw</ntak:vendegId>
      <ntak:szuletesiEv>1959</ntak:szuletesiEv>
      <ntak:nem>FERFI</ntak:nem>
      <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
      <ntak:lakohelyOrszagKod>HU</ntak:lakohelyOrszagKod>
      <ntak:lakohelyIranyitoszam>9662</ntak:lakohelyIranyitoszam>
      <ntak:ifaStatusz>im9</ntak:ifaStatusz>
    </ntak:vendeg>
  </ntak:vendegek>
</ntak:vendegEvent>
<ntak:lakoegyseg>
  <ntak:epulet>J</ntak:epulet>
  <ntak:szobaszam>353</ntak:szobaszam>
  <ntak:tipus>ECONOMY</ntak:tipus>
  <ntak:egyfosAgySzam>1</ntak:egyfosAgySzam>
  <ntak:ketfosAgySzam>0</ntak:ketfosAgySzam>
  <ntak:potAgySzam>0</ntak:potAgySzam>
</ntak:lakoegyseg>
</ntak:vendegEvent>
<ntak:vendegEvent>
  <ntak:idopont>2019-01-08T13:16:09Z</ntak:idopont>
  <ntak:foglalasiSzam>2020/00150</ntak:foglalasiSzam>
  <ntak:vendegek>
    <ntak:vendeg>
      <ntak:vendegId>Zz37UPUu72LCIo32P0Em98N0Wh69DBr</ntak:vendegId>
      <ntak:szuletesiEv>1933</ntak:szuletesiEv>
      <ntak:nem>NO</ntak:nem>
      <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
    </ntak:vendeg>
  </ntak:vendegek>
</ntak:vendegEvent>
```

```
<ntak:lako helyOrszagKod>HU</ntak:lako helyOrszagKod>
<ntak:lako helyIranyitoszam>6067</ntak:lako helyIranyitoszam>
<ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
</ntak:vendeg>
<ntak:vendeg>
  <ntak:vendegId>Eu40HXKs93KKUy23RMKd41TWVv34A0w</ntak:vendegId>
  <ntak:szuletesiEv>2010</ntak:szuletesiEv>
  <ntak:nem>NO</ntak:nem>
  <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
  <ntak:lako helyOrszagKod>HU</ntak:lako helyOrszagKod>
  <ntak:lako helyIranyitoszam>4287</ntak:lako helyIranyitoszam>
  <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
</ntak:vendeg>
<ntak:vendeg>
  <ntak:vendegId>Ur44QXOp73AAQw65SZDg18QAGj83JAm</ntak:vendegId>
  <ntak:szuletesiEv>1996</ntak:szuletesiEv>
  <ntak:nem>NO</ntak:nem>
  <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
  <ntak:lako helyOrszagKod>HU</ntak:lako helyOrszagKod>
  <ntak:lako helyIranyitoszam>7833</ntak:lako helyIranyitoszam>
  <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
</ntak:vendeg>
<ntak:vendeg>
  <ntak:vendegId>Et54KXSg83YWAx33LKNb05VNGm92ZAb</ntak:vendegId>
  <ntak:szuletesiEv>1934</ntak:szuletesiEv>
  <ntak:nem>FERFI</ntak:nem>
  <ntak:allampolgarsagOrszagKod>HU</ntak:allampolgarsagOrszagKod>
  <ntak:lako helyOrszagKod>HU</ntak:lako helyOrszagKod>
  <ntak:lako helyIranyitoszam>7570</ntak:lako helyIranyitoszam>
  <ntak:ifaStatusz>KOTELES</ntak:ifaStatusz>
</ntak:vendeg>
</ntak:vendegek>
<ntak:lakoegyseg>
  <ntak:epulet>L</ntak:epulet>
  <ntak:szobaszam>156</ntak:szobaszam>
  <ntak:tipus>JUNIOR_SUITE</ntak:tipus>
  <ntak:egyfosAgySzam>2</ntak:egyfosAgySzam>
  <ntak:ketfosAgySzam>2</ntak:ketfosAgySzam>
  <ntak:potAgySzam>0</ntak:potAgySzam>
</ntak:lakoegyseg>
```

```

        </ntak:vendegEvent>
    </ntak:erkezett>
</ntak:esemenyek>
</ntak:esemenyvezereIltAdatkuldesRequest>
</soapenv:Body>
</soapenv:Envelope>

```

14.5.2. Example of a response

If the message is correct, the server responds with an HTTP 200 OK response to the HTTPS query. In any other cases, it sends an error message, similar to the following sample SOAP message, describing the error found during validation.

14.6. Booking data transmission

14.6.1. Example of a request

```

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ntak="http://mtu.gov.hu/ntak/v8">
  <soapenv:Header/>
  <soapenv:Body>
    <ntak:foglalasEsemenyRequest>
      <ntak:uzenetId>c636331b-fe63-4dea-8902-ffdb9741c68</ntak:uzenetId>
      <ntak:szoftverVerzio>1.1</ntak:szoftverVerzio>
      <ntak:szallasAdatszolgaltatasiAzonosito>reg0001</ntak:szallasAdatszolgaltatasiAzonosito>
      <ntak:szallasNev>Teszt Szállás</ntak:szallasNev>
      <ntak:szallashelySzolgaltatoAdoszam>89998777-7-77</ntak:szallashelySzolgaltatoAdoszam>
      <ntak:szallashelySzolgaltatoNev>Teszt Szolgáltató</ntak:szallashelySzolgaltatoNev>
      <ntak:foglalasiSzam>110021</ntak:foglalasiSzam>
      <ntak:esemenyLetrejotte>2020-09-03T14:05:16.327114+02:00</ntak:esemenyLetrejotte>
      <ntak:lemondva>false</ntak:lemondva>
      <ntak:foglaloAllampolgarsag>HU</ntak:foglaloAllampolgarsag>
      <ntak:erkezes>2020-07-14</ntak:erkezes>
      <ntak:tavozas>2020-07-20</ntak:tavozas>
      <ntak:foglalasIdopont>2020-09-03T12:05:16.29592Z</ntak:foglalasIdopont>
      <ntak:ertekezesiCsatorna>DIREKT_HAGYOMANYOS</ntak:ertekezesiCsatorna>
      <ntak:foglalasBruttoOsszege>20000.0</ntak:foglalasBruttoOsszege>
      <ntak:foglaltLakoegysegek>
        <ntak:foglaltLakoegyseg>
          <ntak:tipus>ECONOMY</ntak:tipus>

```

```

        <ntak:ferohelyKapacitas>2</ntak:ferohelyKapacitas>
    </ntak:foglaltLakoegyseg>
</ntak:foglaltLakoegysegek>
    <ntak:piaciSzegmens>SZABADIDOS_CSOPORTOS</ntak:piaciSzegmens>
</ntak:foglalasEsemenyRequest>
</soapenv:Body>
</soapenv:Envelope>

```

14.6.2. Example of a successful response

```

<SOAP-ENV:Envelope xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <SOAP-ENV:Body>
    <ns2:foglalasEsemenyResponse xmlns:ns2="http://mtu.gov.hu/ntak/v8"/>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>

```

14.7. SOAP Fault sample message

```

<?xml version="1.0"?>
<env:Envelope xmlns:env=http://www.w3.org/2003/05/soap-envelope>
  <env:Body>
    <env:Fault>
      <env:Code>
        <env:Value>env:Sender</env:Value>
        <env:Subcode>
          <env:Value>HibasIdoAblak</env:Value>
        </env:Subcode>
      </env:Code>
      <env:Reason>
        <env:Text >Hibas idoablakban bekuldott uzenet.</env:Text>
      </env:Reason>
      <env:Detail>
        <e:NtakSoapFaultReszlet>
          <e:message>A vart idoablak 22:00 – 02:00 volt, az uzenet bekuldesere azonban 03:23-kor
kerult sor.</e:message>
          <e:errorCode>234</e:errorCode>
        </e: NtakSoapFaultReszlet>
      </env:Detail>
    </env:Fault>
  </env:Body>
</env:Envelope>

```

```
</env:Body>  
</env:Envelope>
```