

Process Status Interface Standard for Public Service Transactions

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Version History

Version	Date	Description
0.1	2025-10-24	Initial draft for comments

1. Introduction

Citizens and organizations often struggle to understand the status of their ongoing interactions with public authorities. After submitting an application or notification, it is frequently unclear whether the information has been received, whether processing has started, or whether further action is expected from the user. Deadlines and consequences are communicated inconsistently, and different authorities use their own terminology for status updates.

These problems are not caused by technology alone but by the lack of a common way to represent the lifecycle of a process. Every case progresses through identifiable phases, but without a shared vocabulary and interface, users cannot reliably follow them across services.

This draft standard proposes a unified status interface. Its purpose is to provide authorities with a consistent method for publishing process status information, and to give users a clear view of what stage their case has reached, whether action is required, and what happens if no action is taken. It enables centralized portals or other aggregators to display this data in a consistent, user-friendly way, while allowing each authority to maintain control over its own systems.

2. Purpose and Scope

This standard defines a data exchange format and API specification for transmitting status updates from public authorities to shared or centralized user-facing services, such as national portals.

The scope includes:

- Any public-sector service where a process exists between a user (individual or any legal entity) and an authority.
- Processes that are initiated by the user (e.g. applications), by the authority (e.g. audits), or triggered by events or schedules (e.g. eligibility checks).
- Support for various types of messages, including requests for action, informational updates, decisions, and reminders.

This standard does not define how internal workflows should be designed or how users should authenticate to access their information. The receiver of the data (e.g., national citizen portal) is responsible for enforcing authorization and showing the status data only to properly authenticated users. This standard assumes compatibility with national identity and authorization services but does not govern them.

The focus of the specification is on externalized status communication, enabling consistent and transparent user experiences across systems.

The implementation of this interface is agnostic of the underlying integration method. However, in national contexts where secure data exchange layers are available, these can be used to transmit the standardized status messages.

3. Core Concepts and Fields

This section defines the core elements to be included in each status notification transmitted via the interface.

Each status update must contain the following:

- **Authority ID:** Refers to a recognized national service catalogue identifier
- **Authority Name:** Descriptive authority name
- **Service ID:** Refers to a recognized national service catalogue identifier
- **Service Name:** Descriptive service name
- **Case ID:** Unique case identifier from the source system
- **User ID:** Person ID or organizational ID
- **Status Type:** Standardized label (see Chapter 4)
- **Status Detail:** Optional authority-specific detail
- **Process Type:** Standardized (see Chapter 5)
- **Response Type:** mandatory, optional, or informational (see Chapter 6)
- **Expected Action:** Free-text or structured field describing what the user must do
- **Deadline:** Date by which action should be taken (if any)
- **Consequence If No Action:** Free-text describing what happens if user does nothing
- **Notification Channels:** Channels through which the authority has notified the user of this status update. Standardized, one or several (see Chapter 7)
- **Response Channels:** Channels through which the user is expected or allowed to respond to this status update. Standardized, one or several (see Chapter 7)

- **Notification ID:** Reference to the related messages sent by the authority through the notification channels.
- **Appeal Available:** Whether authority offers the user a possibility to appeal. Can be linked to a new deadline
- **Timestamp:** Time the status was generated
- **Source System:** System providing the status

4. Status Type Classification

- Draft
 - o Description: The user has started filling in a form or request, but it has not yet been submitted to the authority.
 - o Example: An online passport application is saved but not sent.
- Received by Authority
 - o Description: The submission has been successfully delivered to the authority, but processing has not yet started.
 - o Example: Tax return received in the system, not yet assigned to processing.
- In Progress
 - o The authority has started handling the submission or case.
 - o Example: Officer reviewing submitted documents.
- Response Required
 - o Description: The authority is waiting for user to act.
 - o Example: User must confirm an inspection date or upload a missing certificate.
- Resolved By Authority
 - o Description: The authority has reached an outcome or issued a decision, and the case is considered complete from their side.
 - o Example: Building permit approved or rejected.
- Closed By User
 - o Description: The user voluntarily cancels or withdraws the request before the authority has resolved it.
 - o Example: Passport application withdrawn after travel plans changed.
- Reminder
 - o Description: A non-critical reminder or nudge from the authority to complete, review, or act before a deadline.
 - o Example: "Your car inspection is due next month."

5. Process Type Classification

Each process status update should be linked to a known process type. A suggested classification includes:

- Application-based process

- Definition: A process initiated by a citizen or organization submitting an application or formal request to a public authority.
 - Examples: Applying for a passport at the police authority, Business registration with the trade register
- Notification-based process
 - Definition: A process triggered by a citizen or organization notifying the authority of a change or event, without requesting a decision or service per se.
 - Examples: Notification of a change of address, Declaration of construction commencement
- Inspection-based process
 - Definition: A process that requires a physical inspection or assessment by the authority before a decision can be made or action continued.
 - Examples: Building inspection by a municipal authority, Driving test evaluation
- Event-triggered automatic process
 - Definition: A process initiated automatically by the system when certain data changes occur in underlying registers, without any user action.
 - Examples: Child birth registration
- Periodic entitlement or eligibility review
 - Definition: Processes requiring regular review or renewal of eligibility, often for benefits, rights, or licenses.
 - Examples: Review of disability benefit status, Annual review of VAT registration status for a business
- Passive updates (e.g., status changes in registers without user action)
 - Definition: Processes or data updates that occur automatically within or across public registers, without user action and without requiring further handling.
 - Examples: Name change automatically reflected across systems, Business deregistration upon bankruptcy

6. Response Type Classification

Each process status update should include information about the type of response that the authority requests from the user. The classification includes:

- Mandatory
 - Definition: The user must respond or take action within the specified deadline.
 - Example: "Submit missing documents by 20 Oct 2026."
 - Consequence: If no action is taken, the process cannot continue or will be decided unfavorably.
- Optional
 - Definition: The user may choose to act, but it is not strictly required.

- Example: “Confirm participation in school excursion.”
- Consequence: If no action is taken, the process continues with a default outcome.
- Informational
 - Definition: The update is provided for awareness only. No action is required.
 - Example: “Your tax return has been received and is being processed.”
 - Consequence: None.

Response type must always be aligned with the following fields:

- Expected Action: what exactly the user is asked to do.
- Deadline: by when the action must be taken (if applicable).
- Consequence If No Action: what happens if the user does not act.

7. Message Channel Classification

All status updates must include:

- A reference to the authority sending the status update
- A reference to the originating service (e.g., the online service or system where the process originates)
- A case identifier that uniquely identifies the transaction or case
- If the status has been communicated to the user through any channel, the channel type and (if available) the message ID should be included.

Multiple channels can be listed if the same message has been sent via several methods (e.g., paper letter and email).

Supported message channels:

- Official messaging portal
 - Definition: A secure, official government messaging system that users access via digital authentication.
 - Example: A message sent to the national citizen portal inbox (e.g., Finland’s Suomi.fi Messages or Denmark’s Digital Post).
- Online Service
 - Definition: The internal user interface of the digital service or e-service portal through which the user interacts with the process.
 - Example: A pending decision shown in the user’s view in the building permit system
- Paper Mail
 - Definition: A physical letter sent by postal service.

- Example: A decision on a tax appeal mailed to the citizen's registered address.
- Messaging portal
 - Definition: A secure electronic mailbox provided by a third party, not owned or operated by the government, but used by authorities to send official or semi-official messages.
 - Example: A notification sent by the tax authority to the user's third party digital mailbox.
- Email
 - Definition: A traditional or a secured email message sent to the user's email address.
 - Example: An automatic confirmation email that a driving license application has been received.
- Text message
 - Definition: A text message sent to a mobile phone number.
 - Example: A reminder to attend a medical inspection sent as an SMS from the health authority.
- Phone call
 - Definition: A personal or automated voice call initiated by the authority.
 - Example: A social worker calls the citizen to inform them about an appointment related to a support application.

8. Benefits of the Standard

The Status Interface Standard improves digital government services by addressing one of their most common shortcomings: the user's lack of visibility and clarity. Citizens and organizations frequently don't know whether a process is ongoing, whether further input is needed, or whether something has already been decided. In particular, users cannot view this information in a single, consistent place across different authorities and services.

By defining a structured interface for communicating status updates, this standard enables:

- **Transparency:** Users can clearly see what is happening with their cases or interactions.
- **Predictability:** Deadlines and expected actions are explicitly communicated.
- **Accountability:** Authorities define consequences for inaction, improving fairness.
- **Accessibility:** Status information is no longer buried across systems or letters but presented in a single unified view.
- **Reusability and Interoperability:** Authorities can expose structured status updates in a consistent way, without re-architecting internal systems.

- **Developer Support:** Standardized fields and schemas reduce development effort and support ecosystem-wide interfaces.
- **User Trust:** A clearer understanding of their own situation builds user confidence in digital services and reduces unnecessary contacts.

This standard helps ensure that digital government services are not just digitized versions of paper bureaucracy, but real improvements for both users and providers.

The standard could also serve as a component of a broader quality framework for digital public services, providing measurable criteria for transparency and process visibility alongside usability and accessibility metrics.

9. Implementation Considerations

While the proposed status interface creates clear benefits for users and for digital government, authorities may face practical challenges in adopting it. Recognizing these challenges helps to ensure realistic implementation planning:

- **Terminology alignment:** Authorities already use internal status codes and phrases. Mapping them to the standardized vocabulary may require interpretation and coordination. The standard is not intended to replace internal terminology but to provide a consistent external view for users.
- **Integration effort:** Each authority must connect its case management systems to the interface. Although the specification is technically lightweight, it requires resources for development, testing, and deployment.
- **Fragmented processes:** Some services do not currently define their processes in clear stages. Implementing the interface requires authorities to identify and publish process phases, which can also improve internal transparency.
- **Responsibility for correctness:** Authorities may be concerned about liability if a status message is outdated or inaccurate. The standard does not alter legal responsibilities: official decisions and documents are still delivered through established channels.
- **Complex or exceptional cases:** Multi-party authorizations, parallel processes, or unusual case types may not map perfectly to the standard fields. The design allows for authority-specific details alongside the core fields.
- **Benefits realized at ecosystem level:** The greatest advantages - clarity, predictability, reduced inquiries - are visible to the user and on the whole government level. For an individual authority, the benefits may be indirect, primarily fewer unnecessary contacts and higher trust.

10. User journeys (short examples)

Change of Address (Notification process)

1. Citizen notifies authority of a new address.
→ Status: *Received by authority*.
2. Authority is processing the application.
→ Status: *In progress*.
3. Authority requests missing details about cohabitants.
→ Status: *Response required* (mandatory).
4. Citizen provides missing details.
→ Status: *Received by authority* or *In progress*.
5. Address is being registered in population system.
→ Status: *Resolved by authority* (informational).

Tax clarification for a company (Application process)

1. Company submits annual tax return.
→ Status: *Received by authority*.
2. Tax authority is processing the application.
→ Status: *In progress*.
3. Tax authority sends clarification request.
→ Status: *Response required* (mandatory, deadline 30 days).
4. Company responds with additional documents.
→ Status: *Received by authority* or *In progress*.
5. Tax authority completes review.
→ Status: *Resolved by authority*.
→ Appeal available.

Child birth registration (Event-triggered process)

1. Birth event is recorded in hospital system.
→ Status: *Received by authority*.
2. Population register automatically creates a new person entry.
→ Status: *Resolved by authority* (informational).

11. Related Research

This standard addresses known pain points in digital public services highlighted in research such as:

- Buell, Porter & Norton (2020): [Surfacing the Submerged State](#): Operational transparency increases trust in and engagement with government
- Cifuentes-Faura (2022): [The Impact of E-Government on Transparency in the European Union](#): a multivariate analysis
- Hung-Yi Hsu (2025): [Operational transparency and satisfaction with public services](#), Public Management Review
- Schnell (2023): [How citizens want to “see” the state](#): Exploring the relationship between transparency and public values
- Venkatesh ym (2016): [Managing Citizens’ Uncertainty in E-Government Services](#): The Mediating and Moderating Roles of Transparency and Trust

12. Call for Feedback

This draft standard is circulated for review and comment.

Feedback is particularly welcome on:

- Practical feasibility: Can the proposed status fields and classifications be implemented in existing authority systems?
- Terminology alignment: Are the labels and categories clear and usable across different services?
- Integration: How could this interface connect to national portals or other quality frameworks for digital public services?

Comments will support refinement of the specification and help evaluate its potential for adoption in real-world use.

Appendix A: API Specification

The normative API specification is provided as a separate OpenAPI 3.0 YAML file:

- Filename: `status_interface_spec.yaml`
- Location: Repository root
- Content: Required fields, enumerations, error codes, and endpoint definition (POST `/status-update`)

Implementations conform if they use all required fields, respect enumerations, and follow the error handling rules defined in the specification.

Appendix B: Example Messages

Example JSON messages are provided as separate files under `examples/`. They illustrate:

- Change of address (`example_change_of_address.json`)

- Tax clarification (example_tax_clarification.json)

Each message contains the full field set, including `expected_action`, `response_type`, `deadline`, and `consequence_if_no_action` where applicable.