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Gesundheit und Soziales
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ECH-0252 V2 – IMPLEMENTATION GUIDE

FEDERAL ELECTIONS

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Federal Statistical Office FSO

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1. Purpose and Scope

1.1 Purpose of This Document

This document provides practical implementation guidance for cantonal authorities and software providers who are required to implement the eCH-0252 Version 2 standard for the transmission of election-related data for federal elections¹ to the federal authorities (Federal Statistical Office and Federal Chancellery).

This includes the transmission of data related to the registration of elections and candidates as well as the transmission of election results.

The implementation of eCH-0252 V2 for federal votes (referendums) is not covered by this document and is described in a separate implementation guide.

Its primary purpose is to support a consistent, complete and operationally reliable implementation of eCH-0252 V2 across all cantons, taking into account specific federal requirements and operational constraints.

Important disclaimer

This document exclusively describes the **technical and structural aspects of data transmission using the eCH-0252 standard**.

It does **not** provide any guidance on how election or voting results are to be determined or calculated.

The determination of results for federal elections and federal votes is governed exclusively by the applicable legal provisions, in particular:

- the Federal Act on Political Rights (BPR),
- the Ordinance on Political Rights (VPR), and
- the instructions contained in the official circular letter issued by the Federal Council to the cantonal governments for each election or vote.

For elections to the Council of States, the relevant **cantonal legal provisions** apply in addition.

In particular, this document:

- provides concrete guidance for the implementation of eCH-0252 V2 in the context of the **Federal Elections 2027**;
- describes the expected end-to-end process for result transmission, including preparation, testing and productive operation;

¹ In this document, the term “Federal elections” is used as a technical umbrella term to refer to elections to the Federal Assembly. It therefore includes both National Council elections and Council of States elections. While Council of States elections are legally governed by cantonal law and are not federal elections in the strict legal sense, the term “Federal elections” is used throughout this document for the sake of simplicity and readability.

- supports the correct interpretation of eCH-specific naming conventions and structural concepts;
- is complemented by additional implementation materials provided by the FSO, such as YAML structure examples and XML sample files (see Chapter 3.2 Supporting Implementation Materials).

The document is intentionally written from a technical and operational perspective and is aimed primarily at IT professionals involved in system design, development, testing and operation.

1.2 Scope and Limitations

This document focuses on the **technical implementation and operational use** of the eCH-0252 V2 standard for federal elections.

It covers in particular:

- the structure and content of eCH-0252 V2 deliveries (informationDelivery and resultDelivery);
- mandatory and recommended elements from a **federal implementation perspective**;
- testing requirements and expected system behaviour;
- operational aspects, including feedback mechanisms and fallback scenarios.

The document does **not** cover:

- the determination or calculation of election or voting results;
- legal interpretations of electoral law;
- internal cantonal business processes that are unrelated to data delivery;
- non-federal result transmission scenarios (purely cantonal or communal).

1.3 Relation to the Official eCH-0252 Specification

The official eCH-0252 specification defines the normative structure, elements and constraints of the standard.

For **federal elections**, this implementation guide constitutes the **authoritative reference document** for implementation and operational use.

In case of deviations or ambiguities:

- the specifications and instructions contained in this document take precedence over the general eCH documentation;
- this applies in particular to elements marked as *optional* in the eCH specification, as well as to general design principles or illustrative examples provided by eCH.

The official eCH-0252 documentation remains the technical baseline of the standard, while this document defines how the standard must be applied to meet federal requirements.

2. High-Level System Overview

This section provides a high-level overview of the system landscape and data flows involved in the transmission of election data from the cantons to the federal level using eCH-0252 V2.

The objective of this chapter is to establish a shared understanding of the involved actors, the underlying principles, and the different types of data deliveries before addressing implementation details in later sections.

2.1 Overall Result Transmission Process

2.1.1 Actors Involved

The following actors participate in the transmission process:

- **Cantonal source systems**
The cantons act as data suppliers. All election-related data (lists, candidates, results and corrections) are entered, maintained and corrected in principle exclusively within the cantonal systems.
- **Sedex**
Sedex is used as the secure transport channel for all eCH-0252 deliveries between the cantons and the federal level.
Details on the concrete Sedex configuration, including sender and receiver identifiers and applicable message types, are described in **Chapter 5.3.1 Sedex identifiers**.
- **Federal receiving system**
On the federal side, a single receiving system operated by the Federal Statistical Office (FSO) processes all incoming deliveries. This system validates, plausibilises and prepares the data for both the FSO and the Federal Chancellery (FCh).

The system architecture follows the **once-only principle** with regard to the electronic transmission of election-related data: cantons deliver all data required for federal processing of federal elections once via eCH-0252. This includes both data transmitted prior to election day (e.g. election and candidate information) and data transmitted on or after election day.

This principle applies exclusively to the **technical exchange of structured election data** between cantonal systems and federal receiving systems. It **does not replace** or affect any legally required submissions outside the eCH-0252 process, such as publications in official gazettes, signed election protocols, ballot materials, or confirmations transmitted by post or e-mail in accordance with applicable legal provisions.

2.1.2 Types of Deliveries

Terminology note

In the official eCH-0252 specification, the delivery elements for federal elections are named *electionInformationDelivery* and *electionResultDelivery*.

For reasons of readability and consistency, this document uses the shortened terms *informationDelivery* and *resultDelivery* throughout. Unless stated otherwise, these terms always refer to the corresponding election-specific delivery types defined in the eCH-0252 standard.

Types of Deliveries

In the context of federal elections, two main types of eCH-0252 deliveries exist:

- **Information deliveries (informationDelivery)**

These deliveries contain structural and reference data, in particular information about election lists, candidates and list unions (list combinations). They are transmitted in the period **before election day** and form the mandatory basis for all subsequent result processing.

The data delivered via informationDelivery are used for the **matching of results** transmitted later via resultDelivery. This includes, in particular, the matching of list identifiers, candidate identifiers and their relationships.

Any change in the cantonal source system that affects these data (e.g. corrections to lists, candidates or identifiers) **must be delivered to the federal level via eCH-0252** before election day. Missing or inconsistent information deliveries directly jeopardise correct result processing on election day.

- **Result deliveries (resultDelivery)**

These deliveries contain the actual counting results and are transmitted **continuously on election day** as soon as fully counted results for individual municipalities become available.

Both delivery types are mandatory components of a complete and correct implementation of eCH-0252 V2 for federal elections.

Figure 1: Simplified overview of the information delivery process (informationDelivery)

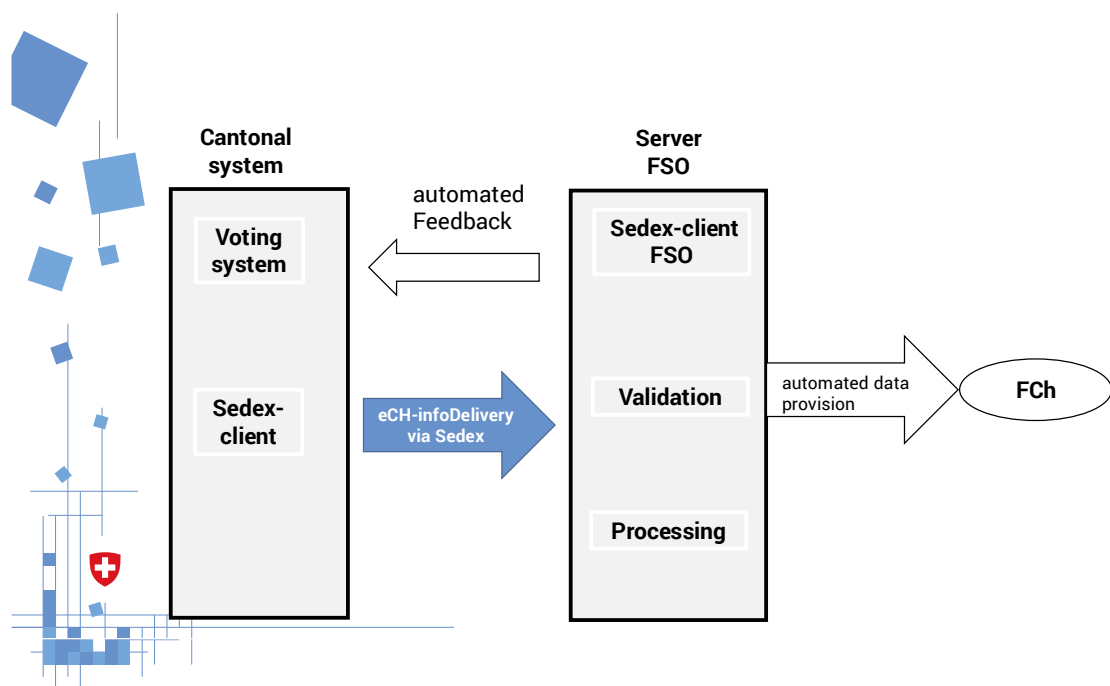
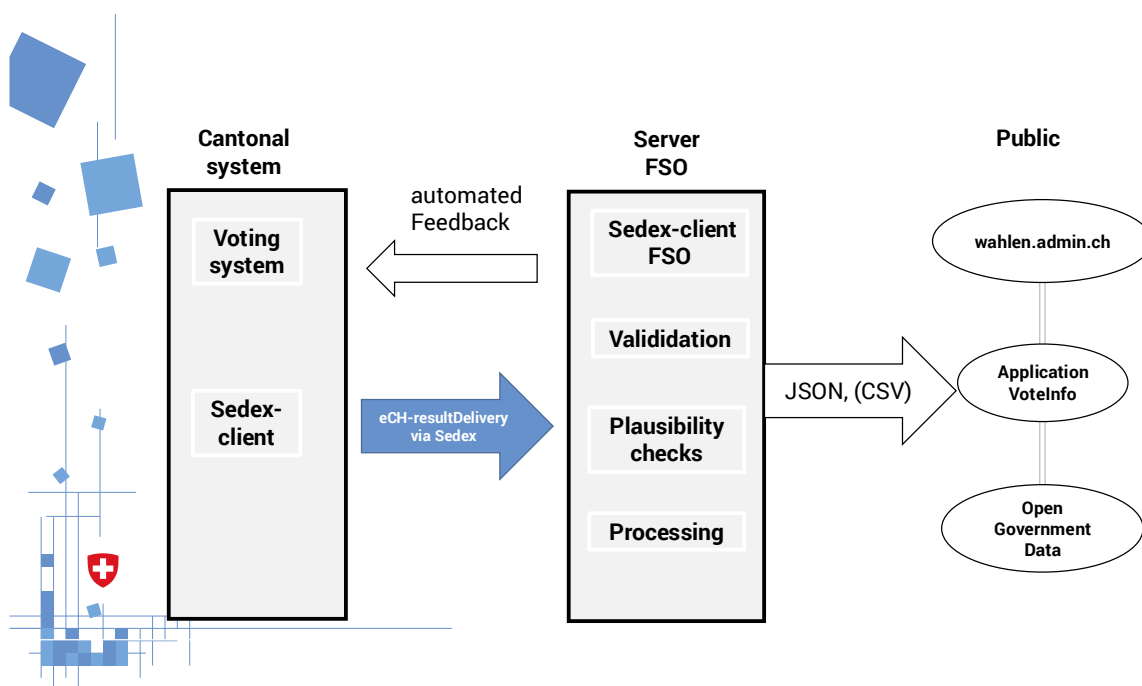


Figure 2: Simplified overview of the result delivery process on election day (resultDelivery)



2.1.3 Information Flow on Election Day

On election day, cantons transmit result deliveries repeatedly as counting progresses at municipal level. Each delivery is processed automatically by the federal receiving system.

During this phase, incoming data are **validated, processed and published incrementally** as soon as fully counted municipal results become available. Any errors or inconsistencies detected during processing are **automatically reported back to the delivering canton**.

Important characteristics of this phase include:

- continuous, incremental deliveries;
- no re-delivery of list or candidate information;
- matching of results based exclusively on identifiers previously delivered via informationDelivery.

Once a canton has fully completed its counting process and has transmitted the complete set of results, the federal system generates an automated e-mail-notification containing the aggregated cantonal results, including the elected candidates. The **elected candidates are published only after the canton has formally confirmed the cantonal result**. Upon confirmation, the result is released as final and the canton is marked as completed.

Time of delivery of panachage data

- **Panachage data must not be transmitted on election day.**

Panachage data may only be transmitted **after election day**, at the earliest on the Monday following election day. They are technically delivered using the resultDelivery mechanism, but include additional elements and significantly increase the size and complexity of the delivery files.

Completeness rule:

Each panachage delivery must be a complete resultDelivery. If a resultDelivery including panachage data is followed by a correction delivery, the correction delivery must also include the panachage data.

Panachage data are described in more detail in Chapter 4.4.5 Panachage data.

3. Implementation Overview

This chapter outlines the **core concepts and artefacts** relevant for implementing eCH-0252 V2 for **federal elections**. It focuses on the aspects that are operationally and technically relevant in the federal context and deliberately avoids repeating the normative details of the eCH-0252 specification.

The implementation of eCH-0252 V2 is supported by a set of **complementary implementation materials** provided alongside this guide. These materials are an integral part of the implementation approach and are published centrally on a dedicated webpage².

3.1 Focus of This Guide

This implementation guide:

- concentrates on the **essential elements** required for federal elections;
- explains how eCH-0252 V2 is applied in the federal context;
- highlights aspects that are operationally critical for election day.

It is **not** intended to be a complete reference of all elements defined in the eCH-0252 schema.

3.2 Supporting Implementation Materials

To support a pragmatic and efficient implementation, a set of **supporting materials** is provided alongside this guide.

These materials are made available **separately for different election contexts**, in particular:

- National Council elections and Council of States elections; and
- proportional and majoritarian election types.

The following files are provided:

- **YAML structure files**
YAML files describing the required structure and relevant elements for:
 - informationDelivery
 - resultDelivery

² <https://bfspoku.github.io/ech-0252-docs/index.html>

These files provide a compact overview of which parts of the extensive eCH-0252 standard are relevant for federal elections and for the respective election type.

- **Example XML deliveries**

Complete eCH-0252 XML files containing example data, illustrating typical delivery scenarios:

- informationDelivery examples with a minimal but complete setup (e.g. 1–2 lists with 2–3 candidates each);
- resultDelivery examples for:
 - a delivery with one counted municipality;
 - a delivery with two counted municipalities;
 - a final delivery containing the complete result, including the element elected.

For simplicity, the result examples are based on a fictitious canton with three municipalities.

These artefacts are intended to complement the textual explanations in this guide and to serve as practical starting points for development and testing.

3.3 Proportional and Majoritarian Elections

The primary focus of this guide is on **National Council elections**. These are conducted predominantly under the **proportional system**, but in a small number of cantons National Council elections are conducted under the **majoritarian system**.

In addition, **Council of States elections** are conducted under the **majoritarian system** in most cantons.

Implementations must therefore support both election types and both voting systems in most cantons:

- **Proportional elections (Proporz)**

Used for most National Council elections. These deliveries involve lists, list unions and candidate allocations.

- **Majoritarian elections (Majorz)**

Used for:

- National Council elections in cantons with a single seat; and
- Most Council of States elections.

The distinction between proportional and majoritarian deliveries is addressed explicitly throughout this guide, in particular in the description of delivery structures and result data.

4. Structure of eCH-0252 Deliveries

This chapter forms the core of the implementation guide. It describes, in a structured and implementation-oriented manner, which eCH-0252 elements are required for **federal elections** and how they are used in practice.

The descriptions in this chapter are organised along the structure of federal elections and reflect how data are produced, transmitted and processed operationally.

The chapter is organised as follows:

- sections that apply **uniformly to all federal elections**, independent of the concrete election or voting system; and
- sections that describe **election-specific and system-specific structures**, differentiated primarily by:
 - the **type of federal election** (National Council elections vs. Council of States elections);
 - the **electoral system** applied (proportional vs. majoritarian), where relevant; and
 - the **delivery type** (informationDelivery vs. resultDelivery).

The element overviews provided in this chapter are descriptive and aim to support understanding and correct implementation. They do not replace the formal definitions contained in the XML schema.

For the concrete XML implementation, the following sources must be consulted in addition to this guide:

- the official eCH-0252 specification and related eCH standards;
- the example XML files provided by the FSO; and
- the YAML structure files describing the expected deliveries.

4.1 Common Header Elements (All Deliveries)

Each eCH-0252 delivery contains a header section. The elements in this section are primarily **informational** in nature and are generally less relevant for the automated processing of election results than the domain-specific content. Information such as the Sedex message type and the Sedex sender ID is derived directly from the **Sedex envelope** and is therefore not interpreted from the eCH-0252 XML content itself.

One header element is, however, **critical for the processing workflow**:

- **testDeliveryFlag**

This element indicates whether a delivery is a **test delivery** or a **productive delivery**.

The value of testDeliveryFlag controls central processes in the federal receiving system, including validation behaviour, feedback handling and data persistence.

It is therefore essential that this element is:

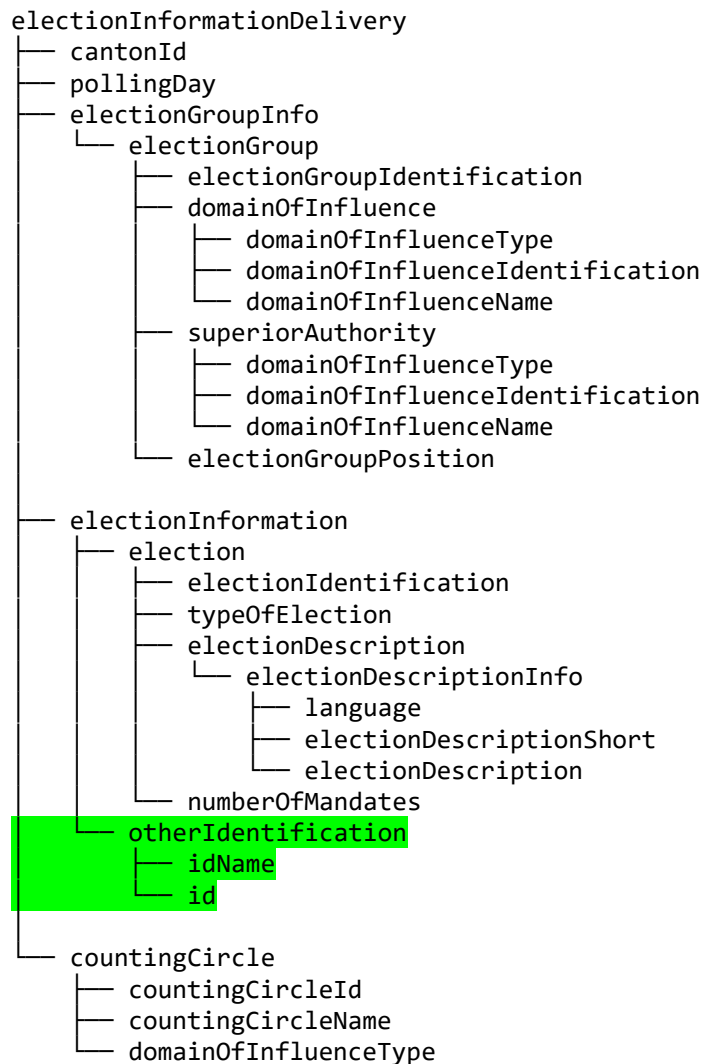
- implemented consistently by the sender;
- set correctly for all test and productive deliveries.

Incorrect usage of testDeliveryFlag may lead to unintended processing or rejection of deliveries.

4.2 InformationDelivery: Election Metadata (All Federal Elections)

The following overview illustrates the **conceptual structure** of the election metadata as used in the informationDelivery for all federal elections (proportional and majoritarian elections, National Council elections and Council of States elections). The structure is for guidance only and does not show all the elements that can be used in accordance with the standard. However, it does contain all elements that are relevant to federal elections.

Conceptual structure (simplified) (updated Feb. 2026)



This guide distinguishes between **federal-critical elements** and metadata elements that are mandatory according to the eCH schema but do not require additional federal-specific interpretation.

Federal-critical metadata elements

The following elements are considered **federal-critical** and must be implemented with particular care:

- cantonId
- otherIdentification / idBund
- electionIdentification
- typeOfElection
- countingCircle / countingCircleId

- countingCircle / domainOfInfluenceType

These elements are described in more detail below.

cantonId

Identifies the delivering canton. This ID is used by the federal receiving system to assign a data delivery to a canton and is therefore central.

otherIdentification / idBund

Main identifier for federal elections. Used for data matching (infoDelivery and resultDelivery). Must be provided as follows for the 2027 Federal elections:

(For Council of States elections, the identifier distinguishes between the first and second round.)

National Council elections:

idName:	idBund
id:	NR2027

Council of States elections – first round:

idName:	idBund
id:	SR2027_1

Council of States elections – second round:

idName:	idBund
id:	SR2027_2

Revised implementation note for otherIdentification / idBund (updated Feb. 2026):

In the official eCH-specifications, the identifier **idBund** (otherIdentification) for informationDelivery can be modelled in two different ways: either according to the eCH-0252 or according to the eCH-0155 structures.

In eCH-0252 resultDelivery, **idBund** (otherIdentification) **must be delivered as an eCH-0252 element** to be schema-compliant. For consistency, the same applies to idBund in informationDelivery.

Concrete examples of the correct placement of idBund are provided in the updated example XML files published together with this implementation guide.

electionIdentification

Technical identifier of the election of the (cantonal) delivery system. Used for data matching. The identifier must be stable and identical in informationDelivery and all related resultDelivery files.

typeOfElection

Indicates the election type (e.g. proportional vs. majoritarian). The value controls validation and processing logic on the federal side.

Proportional election = 1

Majoritarian election = 2

countingCircle

The element countingCircle provides **municipality references** for federal elections.

Note:

For result processing, the federal system does **not** match municipalities based on the municipality data (e.g. countingCircleName) transmitted in the informationDelivery. Instead, it relies on the **official federal municipality register**.

The purpose of countingCircle in the informationDelivery is therefore **consistency checking**: it allows the FSO to verify that the cantonal system and the federal register use the same municipality identifiers.

In the resultDelivery, municipalities are matched **exclusively via countingCircleId**.

countingCircleId

Must contain the official **BFS municipality number**. This identifier is used as the unique key for municipality matching in resultDelivery.

countingCircleName

Descriptive name of the municipality. It is not used for automated processing.

domainOfInfluenceType

This specifies the level. For municipalities, the value must be specified as follows:

domainOfInfluenceType = MU

Secondary metadata elements

Variables that are mainly used for checks and plausibility purposes.

- pollingDay
- domainOfInfluence - domainOfInfluenceType
- superiorAuthority - domainOfInfluenceType
- electionDescription
- numberOfMandates

pollingDay

Specifies the election date. The value must be consistent across all deliveries related to the same election.

domainOfInfluence – domainOfInfluenceType

Must be provided as follows for the 2027 National Council elections:

domainOfInfluenceType: CH

Must be provided as follows for the 2027 Council of States elections:

domainOfInfluenceType: CT

superiorAuthority – domainOfInfluenceType

Must be provided as follows for the 2027 National Council elections:

domainOfInfluenceType: CH

Must be provided as follows for the 2027 Council of States elections:

domainOfInfluenceType: CT

electionDescription

This element is not processed systematically, but it is helpful when a data delivery is inspected manually.

numberOfMandates

Is used for automated plausibility checks.

4.3 National Council Elections (Proportional System) – information Delivery

The purpose of the informationDelivery for proportional elections is to provide all structural and reference data required for:

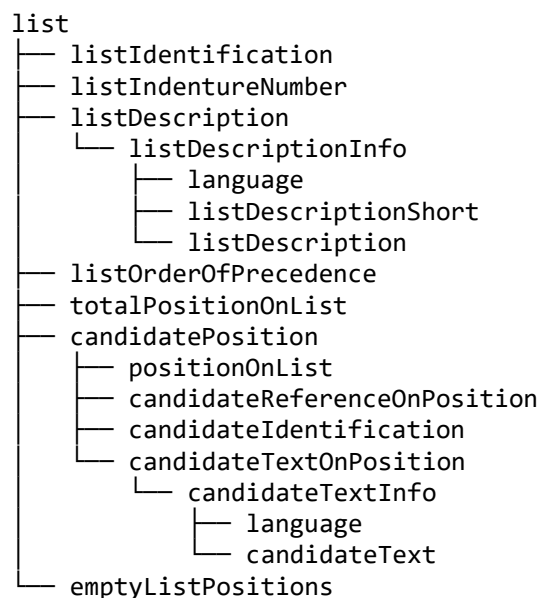
- the examination of election proposals by the Federal Chancellery; and
- the correct processing and matching of result deliveries by the Federal Statistical Office.

From an implementation perspective, the required content can be grouped into the following blocks:

4.3.1 Lists (Proportional Elections – informationDelivery)

The following overview illustrates the **conceptual structure** of list-related data as used in the informationDelivery for proportional elections. The structure is shown for orientation purposes only and does not represent a one-to-one mapping to XML elements.

Conceptual structure (simplified)



This guide distinguishes between **federal-critical list elements** and list elements that are mandatory according to the eCH schema but do not require additional federal-specific interpretation.

Federal-critical list elements

The following elements are considered **federal-critical** for proportional elections and must be implemented with particular care:

- listIdentification
- listIndentureNumber
- listDescription
- listOrderOfPrecedence
- candidatePosition / positionOnList
- candidatePosition / candidateIdentification

listIdentification

Technical identifier of the list as defined in the cantonal source system. The identifier must be **stable** and identical across the informationDelivery and all related resultDelivery files.

listIndentureNumber

Official list number as used on the ballot papers. This value must correspond to the numbering used on the official ballot papers. Serves as an official identifier in the federal system. May not be changed after the rectification period (Bereinigungsfrist, délai pour la mise au point des listes, termine per la modifica) has expired.

listDescription

The listDescription represents the **official list designation**. It corresponds to the list name as printed on the official ballot papers. Only the printed designation may be delivered; no additional, alternative or translated versions must be included.

If the list designation printed on the ballot papers is bilingual, the complete bilingual designation must be provided in full for each of the corresponding language entries.

listOrderOfPrecedence

The element serves as a numerical list number, which is required in the federal system. In addition to the official list number of the canton, the value is also passed on to data users in the form of open government files. Although optional in the eCH-0252 standard, this element is **required from a federal implementation perspective**. For the implementation and testing phase, it is treated as **mandatory**.

candidatePosition / positionOnList

Specifies the position of a candidate on a list.

candidatePosition / candidateReferenceOnPosition

Corresponds to the candidate's printed number on the election lists. Consists of lists and candidate numbers (for example: 01.01). The identifier must correspond exactly to the element "candidateReference" provided in the candidate section of the informationDelivery.

candidatePosition / candidateIdentification

References the candidate assigned to a given list position. The identifier must correspond exactly to the candidate definition provided in the candidate section of the informationDelivery.

Secondary list elements

The following elements are considered **secondary list elements**. They are mainly descriptive or contextual and are not central for automated federal processing:

- totalPositionOnList
- candidateTextOnPosition
- emptyListPositions

These elements are fully covered by the eCH-0252 schema and the provided example files and do not require additional federal-specific explanation here.

4.3.1.1 List Unions

List unions (list combinations, Listenverbindungen, apparentements de listes, congiunzione di liste) describe formal relationships between two or more lists in proportional elections. They are transmitted at the end of the rectification period as part of the informationDelivery and are a **mandatory component** for proportional elections

The following overview illustrates the **conceptual structure** of list union data. The structure is shown for orientation purposes only and does not represent a one-to-one mapping to XML elements.

Conceptual structure (simplified)

```
listUnion
├─ listUnionIdentification
├─ listUnionDescription
│   └─ listUnionDescriptionInfo
│       ├── language
│       └─ listUnionDescription
├─ listUnionType
├─ referencedList
└─ referencedListUnion
```

Although the listUnion element is mandatory according to the federal implementation rules, it may not yet be included in an initial informationDelivery.

For the **implementation and testing phase**, cantonal systems should nevertheless:

- support the delivery of list unions;
- validate the structure and references of list union data;
- ensure that subsequent informationDelivery files can add or update list unions consistently.

listUnionIdentification

Technical identifier of the list as defined in the cantonal source system.

listUnionDescription

Description of the ListUnion. For the National Council elections, it is recommended that short names (listDescriptionShort) of the associated lists be listed here, separated by commas.

listUnionType

Indicates the relationship between the lists.

1 = List union

2 = Sublist union (Unterlistenverbindung, sous-apparentement, sotto-congiunzione di liste)

referencedList

Identification (listIdentification) of all the referenced lists in a specific list union.

referencedListUnion

Only relevant for sublist unions. References the higher-level list union.

4.3.2 Candidates (Proportional Elections – informationDelivery)

The candidate section of the informationDelivery contains all personal and contextual information required to uniquely identify candidates, to validate election proposals, and to correctly interpret and publish election results at federal level.

Candidate data are used by:

- the **Federal Chancellery** for the examination of election proposals; and
- the **Federal Statistical Office** for result processing, plausibility checks and publication.

The following overview illustrates the **conceptual structure** of candidate-related data. The structure is shown for orientation purposes only and does not represent a one-to-one mapping to XML elements.

Conceptual structure (simplified)

```
candidate
├── candidateIdentification
├── candidateReference
├── familyName
├── firstName
├── politicalFamilyName
├── politicalFirstName
├── candidateText
│   ├── candidateTextInfo
│   │   ├── language
│   │   └── candidateText
│   └──
├── dateOfBirth
├── sex
├── occupationalTitle
│   ├── occupationalTitleInfo
│   │   ├── language
│   │   └── occupationalTitle
│   └──
├── dwellingAddress
│   ├── street
│   ├── houseNumber
│   ├── town
│   ├── swissZipCode
│   └── country
│       ├── countryId
│       ├── countryIdISO2
│       └── countryNameShort
├── swiss
│   └── origin
├── title
├── incumbentYesNo
├── partyAffiliation
│   └── partyAffiliationInfo
│       ├── language
│       ├── partyAffiliationShort
│       └── partyAffiliationLong
```

This guide distinguishes between **federal-critical candidate elements** and candidate elements that are mandatory according to the eCH schema but do not require additional federal-specific interpretation.

Federal-critical candidate elements

The following elements are considered **federal-critical** for proportional elections and must be implemented with particular care:

- candidateIdentification
- candidateReference
- familyName
- firstName
- politicalFamilyName
- politicalFirstName
- dateOfBirth
- sex
- occupationalTitle / occupationalTitle
- dwellingAddress
 - street
 - houseNumber
 - town
 - swissZipCode
 - country / countryId
 - country / countryNameShort
- swiss / origin

candidateIdentification

Technical identifier of the candidate as defined in the cantonal source system. The identifier must be unique within the election and stable across all informationDelivery and related resultDelivery files.

candidateReference

Printed candidate reference number as used on the ballot papers. The value must correspond exactly to the reference used in list definitions (e.g. candidateReferenceOnPosition) and may not be changed after the rectification period (Bereinigungsfrist, délai pour la mise au point des listes, termine per la modifica) has expired. Serves as an official identifier in the federal system.

familyName / firstName

These elements represent the **official (legal) name** of the candidate, listed in the municipal administration registers, and are mandatory.

politicalFamilyName / politicalFirstName

These elements represent the name under which the candidate is known in the political context. They must be provided in addition to the official name and are used for publication and result presentation.

dateOfBirth

The full date of birth (day, month, year) is **legally required** for federal (proportional) elections and must be provided completely.

sex

Sex of the candidate. The following values are supported:

- 1 = male
- 2 = female

For the **Federal Elections 2027**, the delivery of a third sex is not supported.

occupationalTitle / occupationalTitle

Occupational designation of the candidate. The occupational title should be delivered exactly as printed on the ballot papers. Only the language versions that are actually printed must be delivered; any additional or alternative translations must not be included.

If multiple language versions are printed, they must be delivered separately per language.

An official academic or honorary title may either be included (preceding) in the occupational title or delivered separately via the element title. In the latter case, it is automatically prepended by the Federal Chancellery.

dwellingAddress

The dwellingAddress element may be used for candidates residing **in Switzerland as well as abroad**. It is based on the addressInformationType defined in **eCH-0010**.

The elements street, houseNumber, town, swissZipCode, countryId and countryNameShort are federal-critical.

For **candidates residing abroad**, the political domicile must be indicated. The corresponding instructions can be found in the chapter **5.3.3 Candidates residing abroad (National Council elections)**.

swiss / origin

Place of origin including canton abbreviation (without brackets). If multiple places of origin exist, they must be listed sequentially and separated by commas.

Secondary candidate elements

The following elements are considered **secondary candidate elements**. While they are not central for automated result processing, they are relevant for verification, statistical evaluation or operational completeness:

- candidateText
- title
- incumbentYesNo
- partyAffiliation

candidateText

Text as displayed for the candidate on the election list at the corresponding list position. This element is used by the federal level primarily for **control and verification purposes**.

title

If the occupational title or academic degree is not delivered as part of the occupational designation, it may be delivered separately using the element title. In this case, the title is **automatically prepended** to the occupational designation by the federal system.

incumbentYesNo

Indicates whether the candidate is an incumbent. This information is **important for the Federal Statistical Office** and is used for statistical purposes.

partyAffiliation

Indicates the party affiliation of the candidate. This information is **important for the Federal Statistical Office** and is used for statistical purposes.

Party affiliation data are **not processed and disseminated fully automatically**. Where available, they should nevertheless be delivered, as missing information would otherwise need to be added manually.

4.4 National Council Elections (Proportional System) – Result Delivery

The resultDelivery is used to transmit counting results and is sent repeatedly as results become available.

Result deliveries are used:

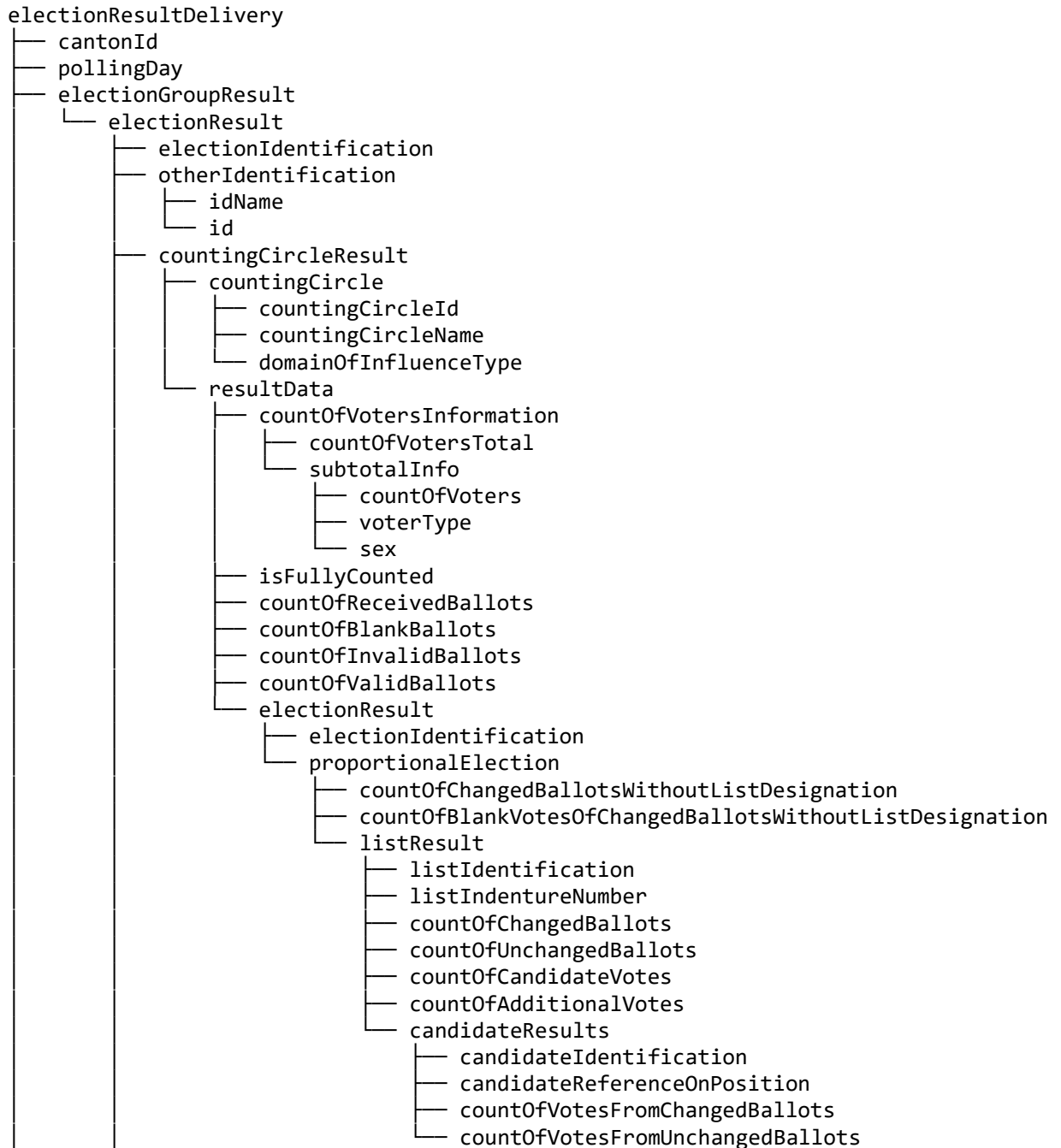
- continuously on election day, as soon as fully counted municipal results are available;
- for corrections after election day;
- for the transmission of additional result data, such as panachage data.

A resultDelivery references the structural and reference data previously transmitted via informationDelivery. It does not retransmit list or candidate definitions and relies entirely on identifiers delivered earlier.

Important restrictions for federal elections

- Only **fully counted municipal results** may be transmitted. Partial results (e.g. postal, early or electronic voting results) are not permitted.
- On election day, **multiple result deliveries are expected**. As soon as a municipality has completed counting, its results should be transmitted without delay.
- Each resultDelivery file may contain results for **one federal election only**.
 - National Council and Council of States results must be delivered in **separate files**.
 - Although eCH-0252 allows mixed deliveries, this is **not permitted** for federal elections.

Conceptual structure (simplified)



Notes:

- The structure shown above focuses on **municipal-level results**.
- Elements related to **elected candidates** and **draw elections** are described separately in dedicated sections.
- The structure is illustrative and does **not** represent a one-to-one XML mapping

4.4.1 Canton and election identification

This section describes the elements used to assign a result delivery to a canton and to the corresponding federal election.

cantonId

Identifies the delivering canton.

The *cantonId* is the **central element for assigning a result delivery to a canton** in the federal receiving system. It is used for technical routing, operational monitoring on election day and aggregation of municipal results at cantonal level.

electionIdentification and otherIdentification / idBund

Each *resultDelivery* references the election using two identifiers:

- *electionIdentification* – technical identifier of the election as defined in the cantonal source system.
- *otherIdentification / idBund* – federal, system-independent identifier of the election.

While *electionIdentification* ensures internal consistency within the cantonal system, ***otherIdentification / idBund* is the central identifier for federal processing** and must therefore be repeated in the *resultDelivery*.

For the **2027 National Council elections**, the following values are mandatory:

- *idName*: idBund
- *id*: NR2027

For the **2027 Council of States elections (see also chapter 4.6)**, the following values are mandatory:

Council of States elections – first round:

- *idName*: idBund
- *id*: SR2027_1

Council of States elections – second round:

- *idName*: idBund
- *id*: SR2027_2

(For Council of States elections, the identifier distinguishes between the first and second round.)

4.4.2 Municipal results (counting circle level)

All result data described in this section are transmitted **per municipality** using the element *countingCircleResult*.

For federal elections, the following rule applies:

Only fully counted municipal results may be transmitted.

4.4.2.1 Counting circle (municipality) identification

countingCircleId

Must contain the official BFS municipality number. This identifier is the central key used by the federal system to match incoming municipal results with the official federal municipality register.

countingCircleName

Descriptive name of the municipality. It is not used for automated processing in the resultDelivery.

domainOfInfluenceType

Indicates the level of the result data. For municipal results, the value must be provided as:

domainOfInfluenceType = MU

Municipality matching in the resultDelivery is performed **exclusively via countingCircleId**.

4.4.2.2 Status flag, eligible voters and ballots (municipal level)

This section describes the counting status, as well as data on eligible voters and ballots transmitted **per municipality** as part of a countingCircleResult.

Relevant elements

The following elements are used at municipal level:

- isFullyCounted
- countOfVotersInformation
 - countOfVotersTotal
 - subtotalInfo
- countOfReceivedBallots
- countOfBlankBallots
- countOfInvalidBallots
- countOfValidBallots
- countOfChangedBallotsWithoutListDesignation (part of electionResult / proportionalElection structure)
- countOfBlankVotesOfChangedBallotsWithoutListDesignation (part of electionResult / proportionalElection structure)

isFullyCounted

Indicates whether the counting for the respective municipality has been completed.

For federal elections, **only fully counted municipal results may be transmitted**. Partial results for municipalities, such as results received by mail or electronically, may not be submitted.

In the federal receiving system, `isFullyCounted` is nevertheless a **key control element**. It is used to determine how many municipalities have completed counting and directly influences aggregation, monitoring and publication processes.

Eligible Voters

countOfVotersInformation

`countOfVotersInformation` describes the number of eligible voters in a municipality.

countOfVotersTotal

`countOfVotersTotal` contains the **total number of eligible voters** for the municipality.

subtotalInfo

`subtotalInfo` is used to provide mandatory breakdowns of the electorate.

Breakdown by sex (mandatory for all cantons)

A breakdown of eligible voters by sex must always be provided:

- sex = 1 → male
- sex = 2 → female

The sum of all `subtotalInfo` / `countOfVoters` values for the sex breakdown must be consistent with `countOfVotersTotal`.

Additional breakdown by voter type (case-dependent)

In cantons where municipalities are responsible for Swiss voters abroad and the corresponding electorate is included in the municipal results, an additional breakdown by voter type is mandatory.

The following values apply:

- voterType = 1 → domestic voters
- voterType = 2 → Swiss voters abroad

This breakdown is provided separately from the breakdown by sex

In cantons where Swiss voters abroad are managed centrally and transmitted as a separate fictitious municipality, this additional breakdown by voter type at municipal level is **not required**.

This case is described in more detail in Chapter **5.3.2 Fictitious municipalities for Swiss voters abroad**.

Ballot counts

The following elements describe ballot statistics for the municipality:

- countOfReceivedBallots
- countOfBlankBallots
- countOfInvalidBallots
- countOfValidBallots
- countOfChangedBallotsWithoutListDesignation
- countOfBlankVotesOfChangedBallotsWithoutListDesignation

The following consistency rule applies:

countOfReceivedBallots
= countOfBlankBallots
+ countOfInvalidBallots
+ countOfValidBallots

The elements countOfChangedBallotsWithoutListDesignation and countOfBlankVotesOfChangedBallotsWithoutListDesignation are not located within the resultData element itself, but are part of the electionResult / proportionalElection structure.

However, since these values are **aggregated at municipal level** and conceptually belong to the same counting scope as the voter and ballot statistics, they are described here together with the other municipality-level result variables.

4.4.2.3 Proportional election results – List results (municipal level)

This section describes **list-level results** transmitted per municipality as part of a countingCircleResult. All values described below relate to **one municipality** and **one proportional election**.

Relevant elements

The following elements are used at list level:

- listIdentification
- listIndentureNumber
- countOfChangedBallots
- countOfUnchangedBallots
- countOfCandidateVotes
- countOfAdditionalVotes

All elements listed in this section are **mandatory and federal-critical** for proportional elections.

listIdentification

Technical identifier of the list as defined in the cantonal source system. References the list to which the results apply. The value must correspond exactly to the listIdentification delivered in the corresponding informationDelivery.

listIndentureNumber

Official list number as used on the ballot papers. This value must correspond to the numbering printed on the official ballot papers and to the value previously delivered via informationDelivery.

It serves as an official identifier in the federal system and **must not be changed once the rectification period** (Bereinigungsfrist, délai pour la mise au point des listes, termine per la modifica) **has expired**.

countOfChangedBallots

Total number of **changed ballots** per list and countingCircle (municipality).

countOfUnchangedBallots

Total number of **unchanged ballots** per list and countingCircle (municipality).

countOfCandidateVotes

Total of all candidate votes per list and per countingCircle (municipality).

countOfAdditionalVotes

Total of all additional votes per list and per countingCircle (municipality).

4.4.2.4 Proportional election results – Candidate results (municipal level)

This section describes **candidate-level results** transmitted per municipality as part of a countingCircleResult.

All values described below relate to **one candidate, one list, one municipality, and one proportional election**.

Relevant elements

The following elements are used at candidate level:

- candidateIdentification
- candidateReferenceOnPosition
- countOfVotesFromChangedBallots
- countOfVotesFromUnchangedBallots

All elements listed in this section are **mandatory and federal-critical** for proportional elections.

candidateIdentification

Technical identifier of the candidate as defined in the cantonal source system.

References the candidate to which the results apply. The value must correspond exactly to the candidateIdentification delivered in the corresponding informationDelivery.

candidateReferenceOnPosition

Printed candidate reference number as used on the election lists.

The value must correspond exactly to the reference delivered in the list definition (candidateReferenceOnPosition) of the informationDelivery.

countOfVotesFromChangedBallots

Total number of votes attributed to the candidate from **changed ballots** per list and countingCircle (municipality).

countOfVotesFromUnchangedBallots

Total number of votes attributed to the candidate from **unchanged ballots** per list and countingCircle (municipality).

4.4.3 Proportional election results – Elected candidates (election level)

This section describes the transmission of **elected candidates** for proportional elections using the element elected.

Unlike municipal result data, the elected element is provided at **election level** and may only be transmitted **after the cantonal result determination process has been completed** and the allocation of seats is known in the cantonal source system.

Timing and delivery logic

The federal receiving system does **not** impose a strict sequence regarding the delivery of the elected element. From a technical perspective, the following approaches are permitted:

- transmission of all municipal results first, followed by a **subsequent complete resultDelivery** that additionally contains the element elected; or
- transmission of the elected element **together with the last outstanding municipal result** as part of a complete resultDelivery.

In all cases, a resultDelivery must always contain the **full set of municipal results available at that point in time**.

The elected element must only be transmitted once the cantonal system has completed result determination and seat allocation.

Publication and confirmation process

The information contained in elected is **not published automatically** upon receipt.

Once a resultDelivery including the elected element has been processed:

- the federal system generates an automated e-mail containing the aggregated cantonal result and the list of elected candidates;
- this e-mail is sent to the responsible cantonal authority for formal confirmation.

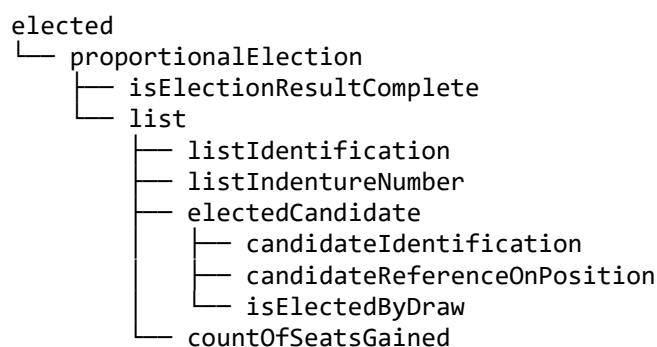
The elected candidates are published **only after** the cantonal confirmation has been received.

Upon confirmation, the result is released as final and the canton is marked as completed.

Note: This confirmation step affects publication only.

Third parties may still derive elected candidates from previously published municipal results.

Conceptual structure (simplified)



Relevant elements

The following elements are used at election level for proportional elections:

- isElectionResultComplete
- list
 - listIdentification
 - listIndentureNumber
 - countOfSeatsGained
 - electedCandidate
 - candidateIdentification
 - candidateReferenceOnPosition
 - isElectedByDraw

All elements listed in this section are **mandatory and federal-critical** once the elected element is delivered.

isElectionResultComplete

Indicates whether the election result determination process has been completed at cantonal level.

This element is **mandatory and federal-critical**, as it controls central processing steps in the federal receiving system.

As a general rule, the federal system assumes that the election result is complete once the elected element is delivered.

An important exception applies in the case of a **pending draw election**: If a draw election is still outstanding, and therefore not all elected are known yet, `isElectionResultComplete` must be set to false. This also applies if the draw election is scheduled to take place on a later day.

In the (unlikely) event of a draw election, a **direct telephone coordination between the canton and the FSO is necessary**, as such cases cannot be handled fully automatically at federal level.

listIdentification

References the list to which the elected candidates and seat allocation apply. The value must correspond exactly to the `listIdentification` delivered in the corresponding `informationDelivery`.

listIndentureNumber

Official list number as used on the ballot papers. The value must correspond to the numbering printed on the official ballot papers and to the value previously delivered via `informationDelivery`.

countOfSeatsGained

Total number of seats allocated to the list at election level.

candidateIdentification

Technical identifier of the elected candidate as defined in the cantonal source system. The value must correspond exactly to the `candidateIdentification` delivered in the corresponding `informationDelivery`.

candidateReferenceOnPosition

Printed candidate reference number as used on the ballot papers. The value must correspond exactly to the reference delivered in the list definition of the `informationDelivery`.

isElectedByDraw

Indicates whether the candidate was elected as a result of a draw.

4.4.4 Draw elections (drawElection)

This section describes the optional transmission of information related to **draw elections** (tie-breaking by draw, Losziehung, tirage au sort, decisione per sorteggio) for proportional elections.

The `drawElection` element may be delivered in cases where a draw is required to determine the allocation of a seat. From a federal system perspective, this element is **not expected to be processed fully automatically**.

For federal processing and publication, the decisive information is the list of **elected candidates** transmitted via the element `elected`, including the indicator `isElectedByDraw` where applicable. Once a draw has been completed, a **final resultDelivery** containing the definitive elected candidates must be transmitted.

If a draw decision is still pending, the element **isElectionResultComplete** must be delivered with the **value false**, even if the draw is scheduled to take place on a later date. The election result is considered complete only once the draw has been carried out and the final outcome is known.

In the (unlikely) event of a draw election, **direct coordination between the canton and the Federal Statistical Office (FSO) / the Federal Chancellery (FCh)** is required, as this situation cannot be handled in a fully automated way at federal level.

4.4.5 Panachage data

This section describes the transmission of **panachage data** for proportional National Council elections.

Panachage data are **not required on election day** and must **not be transmitted on election day**. Due to their potentially large data volume and their impact on system performance, panachage data are expected to be delivered **after election day**, typically on the Monday following the election Sunday. The exact timing must be coordinated between the canton and the FSO.

Concept and placement in the data structure

In eCH-0252, panachage data are transmitted as an **extension of the candidate-level results**. The relevant information is attached to the `candidateResults` element.

For each candidate, additional information is provided that describes how many votes the candidate received from **changed ballots**, broken down by the list from which the vote originated, as well as votes from changed ballots **without list designation**.

Conceptual structure (simplified)

```
candidateResults
├── candidateIdentification
├── candidateReferenceOnPosition
├── countOfVotesFromChangedBallots
├── countOfVotesFromUnchangedBallots
├── candidateListResultsInfo
│   ├── candidateListResults (per list)
│   │   ├── listIdentification
│   │   └── countOfVotesFromChangedBallots
│   └── countOfVotesFromBallotsWithoutListDesignation
```

The element `candidateListResultsInfo` may contain multiple `candidateListResults` elements, one for each list from which the candidate received votes on changed ballots.

4.5 National Council Elections (Majoritarian System)

4.5.1 Information Delivery

This section describes the use of the informationDelivery for **National Council elections conducted under the majoritarian system**, i.e. in cantons with exactly one seat.

The requirements for common header elements and election metadata are described in **Chapter 4.1 (Common Header Elements)** and **Chapter 4.2 (InformationDelivery – Election Metadata)** and apply equally to majoritarian elections.

General remarks

For majoritarian National Council elections, two different cantonal models must be distinguished:

- cantons with a **mandatory candidate registration process** prior to election day; and
- cantons **without mandatory candidate registration**, where any person fulfilling the passive voting rights may be elected.

In addition to these two models, some cantons apply a **voluntary candidate notification or registration procedure**.

In such cases, candidates should be transmitted in advance via informationDelivery **only if it is guaranteed** that the identifiers used for the candidate (in particular candidateIdentification and, where applicable, candidateReference) will be **identical and stable** in the corresponding resultDelivery on election day.

If this identifier consistency cannot be ensured, the candidate must not be transmitted in advance and must instead be handled as a write-in candidate in resultDelivery.

Candidates (cantons with mandatory registration)

In cantons where candidates must be registered prior to election day, all candidates are known and fixed before the election.

In this case, candidate data are delivered via informationDelivery and the **structure of the candidate element is identical to that used for proportional elections**.

The applicable structure and element descriptions are therefore the same as those defined in:

Chapter 4.3.2 Candidates (Proportional Elections – informationDelivery)

Party affiliation (mandatory for cantons with mandatory registration)

In cantons with a mandatory candidate registration procedure, **party affiliation information is legally required** for National Council elections conducted under the majoritarian system.

In these cantons, the element **partyAffiliation** must therefore be provided in informationDelivery for all registered candidates, in accordance with the general candidate model.

All candidate identifiers delivered in the informationDelivery must be stable and are referenced later in the corresponding resultDelivery.

Note: The **candidateReference** element should also be provided, simply as a sequential candidate number in the following format: "01", "02"

For **candidates residing abroad**, the political domicile must be indicated. The corresponding instructions can be found in the chapter **5.3.3 Candidates residing abroad (National Council elections)**.

Cantons without mandatory candidate registration

In cantons where there is no obligation to register for elections, information about candidates or persons who receive votes on election Sunday is not known in advance.

These cases require the use of the **eCH-0252 write-in candidate mechanism** (writeInCandidate).

In contrast to registered candidates, **write-in candidate information is not transmitted via informationDelivery**.

Relevant candidate data are transmitted **directly on election day as part of the resultDelivery**.

The handling of write-in candidates for majoritarian National Council elections is described in **Chapter 4.5.2 Result Delivery**.

4.5.2 Result Delivery

National Council Elections (Majoritarian System)

Scope and relation to proportional elections

The transmission of result data for National Council elections conducted under the **majoritarian system** largely follows the same structural and procedural principles as described for proportional elections.

Unless explicitly stated otherwise, the following chapters apply **unchanged** to majoritarian National Council elections:

- **4.4 National Council Elections (Proportional System) – Result Delivery**
(introductory remarks and general delivery principles)
- **4.4.1 Canton and election identification**
- **4.4.2 Municipal results (counting circle level)**, including:
 - 4.4.2.1 Counting circle identification
 - 4.4.2.2 Status flag, eligible voters and ballots (municipal level)

The concepts of municipality-based result transmission, fully counted results only, repeated deliveries on election day, and automated processing and feedback apply identically.

Differences compared to proportional elections

For majoritarian National Council elections, the following proportional-election-specific elements do **not** apply and must **not** be transmitted:

- countOfChangedBallotsWithoutListDesignation
- countOfBlankVotesOfChangedBallotsWithoutListDesignation

All other voter and ballot statistics at municipal level are transmitted as described for proportional elections.

Note: The candidateReference element should also be provided, simply as a sequential candidate number in the following format: "01", "02"

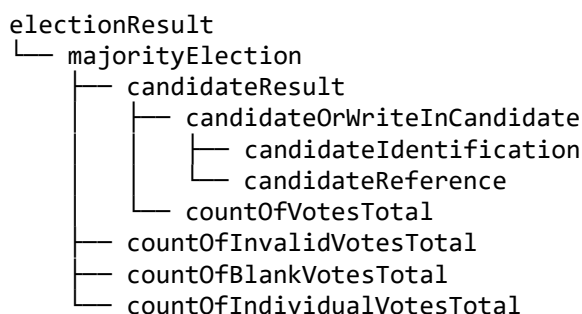
4.5.2.1 Majority election results (municipal level)

This section describes result transmission for **cantons with a mandatory candidate registration procedure**, where all candidates are known prior to election day and have been transmitted in advance via informationDelivery.

For majoritarian National Council elections, election results are transmitted using the element majorityElection within the electionResult block.

Results are aggregated **per municipality** and reference candidates directly, without any list-related structures. The handling of candidates not known prior to election day is described separately in **chapter 4.5.2.2 Write-in candidates**.

Conceptual structure (simplified)



The structure shown above is illustrative and does not represent a complete XML mapping.

candidateResult

Each candidateResult element represents the result of **one candidate or one write-in candidate in one municipality**.

- **candidateOrWriteInCandidate**
Container element indicating whether the result refers to a candidate that was known and registered prior to election day or to a write-in candidate.
 - For **registered candidates**, both of the following elements must be provided:
 - candidateIdentification
 - candidateReference

These values must correspond exactly to the candidate definitions transmitted earlier via informationDelivery.

- For **candidates not known prior to election day (write-in candidates)**, the elements candidateIdentification and candidateReference are replaced by the eCH-0252 construct writeInCandidate.

Further details are described in **chapter 4.5.2.2 Write-in candidates**.

- **countOfVotesTotal**

Total number of votes received by the candidate or write-in candidate in the respective municipality.

In addition, the following aggregated values are transmitted at municipal level within majorityElection:

- **countOfInvalidVotesTotal**

Total number of invalid votes in the municipality.

- **countOfBlankVotesTotal**

Total number of blank votes in the municipality.

- **countOfIndividualVotesTotal**

Total number of votes cast for individual persons who are not reported as named candidates. This element is used to aggregate so-called individual votes ("vereinzelte Stimmen"). These are votes cast for persons who were not transmitted in advance via informationDelivery and who do not reach the threshold required to be reported individually by name.

For National Council elections, this threshold is 100 votes. Votes for write-in candidates below this threshold are not transmitted as separate candidateResult elements, but are instead aggregated and delivered as a single total in countOfIndividualVotesTotal.

Note on ballot-related totals for majoritarian National Council elections

For majoritarian National Council elections (cantons with exactly one seat), these values correspond directly to the ballot counts transmitted at countingCircleResult level:

- countOfInvalidVotesTotal ↔ countOfInvalidBallots
- countOfBlankVotesTotal ↔ countOfBlankBallots

This equivalence results from the fact that only one seat is contested and therefore only one candidate vote can be cast per ballot.

Nevertheless, these elements are mandatory according to the eCH-0252 schema and must be explicitly provided in the majorityElection structure, even if their values can be derived from the ballot counts.

4.5.2.2 Write-in candidates

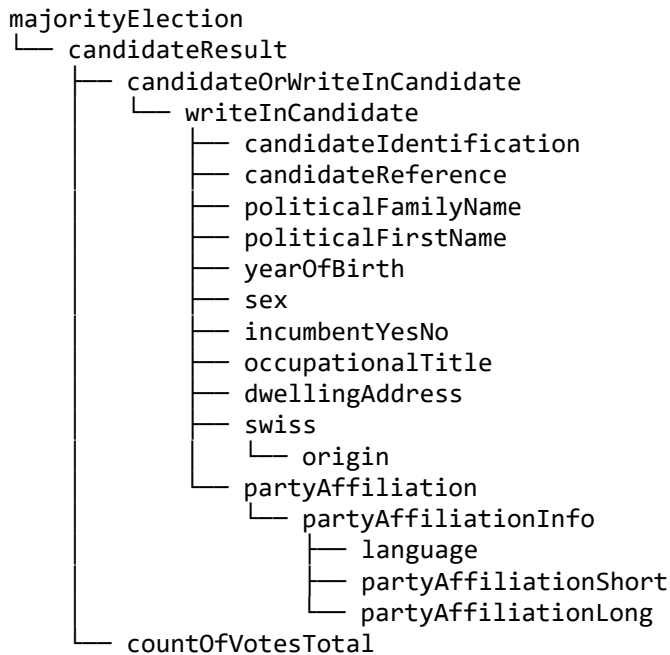
This section describes the handling of **write-in candidates** for cantons **without** a mandatory candidate registration procedure.

Write-in candidates are candidates that were not transmitted in advance via informationDelivery, but may nevertheless receive votes if cantonal election rules allow it. Relevant write-in candidates are transmitted **on election day**, together with the municipal results, within the resultDelivery.

Placement in the result structure

Write-in candidates are transmitted within majorityElection / candidateResult using the element candidateOrWriteInCandidate.

Conceptual structure (simplified)



candidateOrWriteInCandidate is a choice construct. It contains **either**:

- a reference to a registered candidate (candidateIdentification, and candidateReference), **or**
- a writeInCandidate element providing candidate information inline.

writeInCandidate

writeInCandidate is an explicit XML element and follows the eCH-0155 candidateType structure.

From a federal implementation perspective, write-in candidate information should be provided **as completely as possible**. However, it is recognised that on election day only limited information may be available.

For this reason, the following elements are considered **federal-critical minimum information on election day** for write-in candidates and should be provided whenever a write-in candidate must be reported by name:

- candidateIdentification
Mandatory within eCH-0155 candidateType. If a write-in candidate is elected, this identifier is used to reference the person in the elected element.
- politicalFamilyName / politicalFirstName
Political name as known in the local political context. This is used because the official name may not be reliably available on election day.
- yearOfBirth
Year of birth as an identifying attribute when full date of birth is not available.

- dwellingAddress
(town when full dwellingAddress is not available)
- sex
Sex of the candidate (see coding rules in the candidate section).
- partyAffiliation
Party or political group affiliation.
- incumbentYesNo
Incumbency information used for federal statistical purposes.

Subsequent completion / corrections

Additional attributes for write-in candidates (e.g. official name, full date of birth, address or other descriptive fields) may be delivered timely **after election day** using a subsequent resultDelivery, analogous to a correction delivery.

4.5.2.3 Elected candidates

This section describes the transmission of **elected candidates** for majoritarian National Council elections using the element elected / majorityElection.

The following aspects are identical to proportional elections and therefore apply here as well:

- **Timing and delivery logic** (see **Chapter 4.4.3 Proportional election results – Elected candidates**)
- **Publication and confirmation process** (see **Chapter 4.4.3 Proportional election results – Elected candidates**)

Structure and identification rules

Elected candidates are transmitted at **election level** (not per municipality). The element isElectionResultComplete is used as described for proportional elections.

Two cases must be distinguished:

A) Elected registered candidate (known in advance)

```

elected
├── majorityElection
│   ├── isElectionResultComplete
│   └── electedCandidate
│       ├── candidateOrWriteInCandidate
│       │   ├── candidateIdentification
│       │   └── candidateReference

```

In this case, candidateIdentification (and candidateReference) must correspond exactly to the candidate definition transmitted earlier via informationDelivery.

B) Elected write-in candidate

```
elected
├── majorityElection
│   ├── isElectionResultComplete
│   └── electedCandidate
│       ├── candidateOrWriteInCandidate
│       └── writeInCandidate
│           ├── candidateIdentification
│           └── candidateReference
```

In this case, writeInCandidate / candidateIdentification (and candidateReference) must correspond exactly to the identifier used for the same write-in candidate in majorityElection / candidateResult.

4.6 Council of States Elections (Majoritarian System)

This section describes the implementation of eCH-0252 V2 for **Council of States elections**.

In contrast to National Council elections, the transmission and processing of Council of States results follow a **simplified operational model**:

- On election day, results are **not processed and published incrementally** by the Federal Statistical Office (FSO). A **single resultDelivery** is transmitted once the cantonal counting and determination of the result has been completed
- The confirmation and publication process, including the **formal confirmation by the canton via e-mail**, applies **analogously** to National Council elections.

Council of States elections may consist of **multiple election rounds** (e.g. first and second round). In the eCH-0252 logic, each election round is treated as a separate election with its own election metadata. For each election round, an informationDelivery is therefore mandatory.

Candidate registration and write-in candidates

For Council of States elections, many cantons do **not** require formal candidate registration prior to election day, in particular for the first round.

As a consequence:

- candidates may receive votes or be elected **without having been known or registered in advance**; and
- not all candidates can necessarily be delivered to the federal level prior to election day via informationDelivery.

Candidates that are **not delivered in advance** via informationDelivery are transmitted **only on election day** as so-called **write-in candidates**, using the corresponding constructs in resultDelivery.

Both cases are addressed separately in the following sections.

(Note: This chapter describes Council of States elections conducted under a majoritarian system.

As of 2026, two cantons apply a proportional system for Council of States elections. These cases are not described separately in this guide and will be coordinated directly between the respective cantons and the FSO during implementation.)

4.6.1 Information Delivery (Council of States)

The elements that apply uniformly to all federal elections are described in:

- **4.1 Common Header Elements (All Deliveries)**
- **4.2 InformationDelivery: Election Metadata (All Federal Elections)**

The following sections describe Council-of-States-specific aspects of informationDelivery.

4.6.1.1 Candidates (Council of States elections)

Where candidates are known prior to election day, they must be transmitted via `informationDelivery`.

This applies to candidates whose candidacy has an **official character** at cantonal level. This includes in particular:

- candidates who have been formally registered, where a registration procedure exists; and
- candidates who have been officially announced to the canton (e.g. via a voluntary registration or notification procedure), even where no formal registration obligation applies.

In many cantons, no mandatory candidate registration exists for Council of States elections. Nevertheless, voluntary notification procedures are commonly used. Candidates making use of such procedures are typically listed by the canton in official election materials and are therefore considered officially known prior to election day.

Candidates who have **not** been officially notified to the canton should generally **not** be transmitted in advance via `informationDelivery`.

An advance transmission outside a formal or voluntary notification procedure should only occur in exceptional cases, for example where a candidacy is publicly declared and it can reasonably be expected that the person will receive a significant number of votes (e.g. public announcements in the media).

The structure of candidate data corresponds to the general candidate model used for federal elections.

The following elements are **mandatory** for candidates transmitted in advance for Council of States elections:

Mandatory candidate elements:

- **candidateIdentification**
Technical identifier of the candidate in the cantonal source system.
This identifier must be stable and must be reused unchanged in all related `resultDelivery` files.
- **candidateReference**
Official candidate reference or number, where applicable.
If used, the value must remain stable across all deliveries.
- **politicalFamilyName**
Official family name of the candidate.
- **politicalFirstName**
Official first name of the candidate.
- **dateOfBirth**
The full date of birth (day, month, year).
- **sex**
Sex of the candidate.
For the Federal Elections 2027, the following values apply:

- 1 = male
- 2 = female
- 3 = unspecified (where permitted under cantonal legislation)

- **incumbentYesNo**

Indicates whether the candidate is an incumbent.

This information is used for statistical purposes by the FSO.

Important consistency rule:

Any candidate transmitted via informationDelivery must be referenced **unchanged** in the corresponding resultDelivery.

In particular, candidateIdentification (and, where used, candidateReference) must match exactly.

Candidates who are not known prior to election day are not transmitted via informationDelivery.

These candidates are transmitted exclusively on election day as write-in candidates within resultDelivery.

Their transmission is described in section 4.6.2 Result Delivery.

4.6.2 Result Delivery (Council of States)

This section describes the transmission of result data for Council of States elections.

The description below refers to the **first election round**. If a second election round takes place, it is treated as a separate election and must be announced in advance via a new informationDelivery.

Processing characteristics

The following processing characteristics apply **on election day of the first election round**:

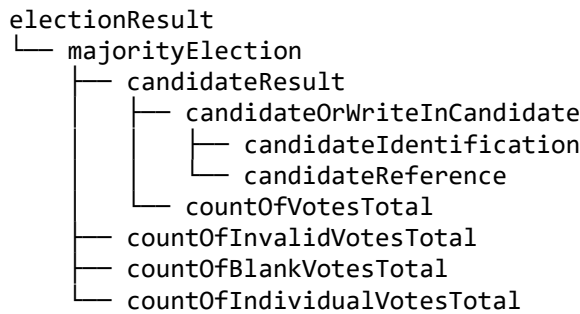
- Council of States results are **not processed and published incrementally** by the federal system. A **single resultDelivery** is transmitted after completion of the cantonal result determination.
- The confirmation and publication process applies analogously to National Council elections.

4.6.2.1 Majority election results (municipal level)

For Council of States elections, election results are transmitted using the element majorityElection within the electionResult block.

Results are aggregated **per municipality** and reference candidates directly, without any list-related structures.

Conceptual structure (simplified)



candidateResult

Each candidateResult element represents the result of **one candidate or one write-in candidate in one municipality**.

- **candidateOrWriteInCandidate**
Container element indicating whether the result refers to a candidate that was known and transmitted in advance via informationDelivery or to a write-in candidate.
 - For **registered candidates**, both of the following elements must be provided:
 - candidateIdentification
 - candidateReference These values must correspond exactly to the candidate definitions transmitted earlier via informationDelivery.
 - For **candidates not known prior to election day (write-in candidates)**, the elements candidateIdentification and candidateReference are replaced by the eCH-0252 construct writeInCandidate. Further details are described in **chapter 4.6.2.2 Write-in candidates**.
- **countOfVotesTotal**
Total number of votes received by the candidate or write-in candidate in the respective municipality.

In addition, the following aggregated values are transmitted at municipal level within majorityElection:

- **countOfInvalidVotesTotal**
Total number of invalid votes in the municipality.
- **countOfBlankVotesTotal**
Total number of blank votes in the municipality.
- **countOfIndividualVotesTotal**
Total number of votes cast for individual persons who are not reported as named candidates. This element is used to aggregate so-called individual votes (“vereinzelte Stimmen”). These are votes cast for persons who were not transmitted in advance via informationDelivery and who do not reach the threshold required to be reported individually by name.

Votes for write-in candidates below this threshold are not transmitted as separate candidateResult elements, but are instead aggregated and delivered as a single total in countOfIndividualVotesTotal.

For Council of States elections in cantons with only one seat, these values correspond directly to the ballot counts transmitted at countingCircleResult level:

- countOfInvalidVotesTotal ↔ countOfInvalidBallots
- countOfBlankVotesTotal ↔ countOfBlankBallots

This equivalence results from the fact that only one seat is contested and therefore only one candidate vote can be cast per ballot.

Nevertheless, these elements are mandatory according to the eCH-0252 schema and must be explicitly provided in the majorityElection structure, even if their values can be derived from the ballot counts.

4.6.2.2 Write-in candidates

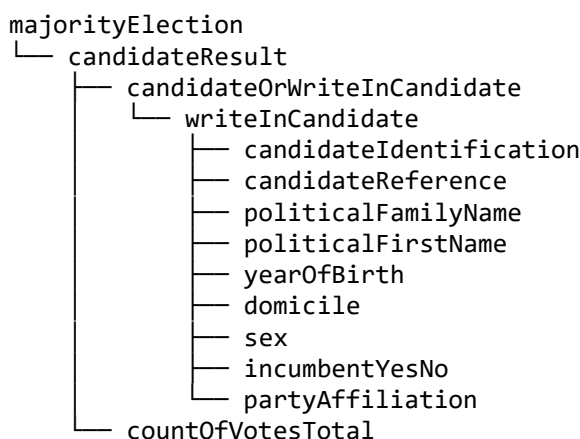
This section describes the handling of write-in candidates for Council of States elections.

Write-in candidates are candidates that were **not transmitted in advance via informationDelivery**, but may nevertheless receive votes if cantonal election rules allow it. Relevant write-in candidates are transmitted on election day together with the municipal results within the resultDelivery.

Placement in the result structure

Write-in candidates are transmitted within majorityElection / candidateResult using the element candidateOrWriteInCandidate.

Conceptual structure (simplified)



candidateOrWriteInCandidate is a choice construct. It contains either: - a reference to a registered candidate (candidateIdentification and candidateReference), or - a writeInCandidate element providing candidate information inline.

writeInCandidate

writeInCandidate is an explicit XML element and follows the eCH-0155 candidateType structure.

From a federal implementation perspective, write-in candidate information should be provided **as completely as possible**. However, it is recognised that on election day only limited information may be available.

The following elements are considered **federal-critical minimum information** for write-in candidates on election day and should be provided whenever a write-in candidate must be reported by name:

- candidateIdentification
- politicalFamilyName / politicalFirstName
- yearOfBirth
- domicile
- sex
- partyAffiliation
- incumbentYesNo

Additional attributes may be delivered after election day using a subsequent resultDelivery, analogous to a correction delivery.

4.6.2.3 Elected candidates

This section describes the transmission of elected candidates for Council of States elections using the element elected / majorityElection.

The following aspects are identical to proportional elections and therefore apply here as well:

- **Timing and delivery logic** (see Chapter 4.4.3 Proportional election results – Elected candidates)
- **Publication and confirmation process** (see Chapter 4.4.3 Proportional election results – Elected candidates)

Use of isElectionResultComplete

For Council of States elections, the element isElectionResultComplete is used to signal the **completion of an election round**.

Each election round (e.g. first or second round) is treated as a **separate election** in the eCH-0252 context and has its own informationDelivery and resultDelivery.

For a given election round, isElectionResultComplete **must be set to true once counting and determination of the result for that round are completed**, irrespective of whether a further election round will follow.

From the federal system's perspective, isElectionResultComplete = true indicates that the respective election round is concluded.

Structure

For the first round of Council of States elections, the element `absoluteMajority` must be provided and must contain the number of votes required to reach an absolute majority.

Two cases must be distinguished:

A) Elected registered candidate (known in advance)

```
elected
├── majorityElection
│   ├── absoluteMajority
│   ├── isElectionResultComplete
│   └── electedCandidate
│       ├── candidateOrWriteInCandidate
│       │   ├── candidateIdentification
│       │   └── candidateReference
```

In this case, `candidateIdentification` and `candidateReference` must correspond exactly to the candidate definition transmitted earlier via `informationDelivery`.

B) Elected write-in candidate

```
elected
├── majorityElection
│   ├── absoluteMajority
│   ├── isElectionResultComplete
│   └── electedCandidate
│       ├── candidateOrWriteInCandidate
│       │   └── writeInCandidate
│       │       ├── candidateIdentification
│       │       └── candidateReference
```

In this case, the identifiers used in the elected element must correspond exactly to those used for the same write-in candidate in `majorityElection` / `candidateResult`.

4.6.2.4 Second election round (Council of States Election)

If a second election round is required, it **must be announced in advance via a new `informationDelivery`**.

Each election round is treated as a **separate election** with its own identifiers and metadata.

The result structure for the second round largely corresponds to that of the first round, with minor differences.

In particular, the element `absoluteMajority` **must not be provided** for the second round, as the election is decided by a **simple majority**.

5. Identification and IDs

This chapter defines the general identification principles that apply to all eCH-0252 deliveries for federal elections. It consolidates rules that are referenced throughout this guide and specifies binding requirements for the use and consistency of identifiers.

5.1 General Identification Principles

For federal elections, a dual identification concept applies to several core entities. Each entity is identified by:

- a technical identifier originating from the cantonal source system; and
- an official identifier, which in the case of the list and candidate identifiers is legally binding and printed on the ballot papers.

Both identifiers serve different purposes and must be delivered consistently.

5.1.1 Identifier pairings

The following identifier pairings apply:

- Election
 - electionIdentification
 - otherIdentification / idBund
- List
 - listIdentification
 - listIndentureNumber
- Candidate
 - candidateIdentification
 - candidateReference / candidateReferenceOnPosition

The technical identifier is used for internal referencing and technical consistency. The official identifier represents the legally relevant reference used at federal level and for publication.

5.1.2 Stability and change management

The following rules apply:

- Technical identifiers may change between different informationDelivery files, provided that the most recent identifiers are delivered to the federal system and all subsequent resultDelivery files use the currently valid identifiers.
- Official identifiers are subject to stricter constraints:
 - listIndentureNumber
 - candidateReference
 - candidateReferenceOnPosition

These identifiers must not be changed after the legally binding rectification period (Bereinigungsfrist, délai pour la mise au point des listes, termine per la modifica) has expired.

If a technical identifier changes in the cantonal system, the change must be transmitted via a new informationDelivery before any related results are delivered.

5.2 Federal Election Identifiers (idBund)

For federal elections, the identifier idBund is mandatory and serves as the system-independent federal reference for the election.

For the Federal Elections 2027, the following values apply:

- National Council election: idBund = NR2027
- Council of States election – first round: idBund = SR2027_1
- Council of States election – second round: idBund = SR2027_2

The idBund identifier:

- must be delivered via otherIdentification;
- must be identical in all related informationDelivery and resultDelivery files

5.3 Additional Identifiers and Special Cases

5.3.1 Sedex identifiers

Sedex-specific identifiers (such as sender ID, receiver ID and message type) are part of the Sedex envelope and are not interpreted from the eCH-0252 XML content itself. They are nevertheless relevant for routing, traceability and operational control.

For federal elections, the following Sedex parameters apply to all data deliveries described in this document:

- Sedex ID of the federal system: **4-846928-9**
- Accepted Sedex message type: **1240**

Important note:

Each canton must communicate the Sedex ID of the Sedex client that will be used to transmit election data for federal elections. This Sedex ID will be registered in the federal system and explicitly authorised for the message type 1240.

Data deliveries originating from Sedex IDs that are not registered in the federal system, or using message types other than 1240, **will not be processed**.

5.3.2 Fictitious municipalities for Swiss voters abroad

In some cantons, Swiss voters abroad are administered centrally. In these cases, the results of Swiss voters abroad are transmitted using a fictitious municipality, as has been done in previous federal elections.

This approach applies only to cantons where Swiss voters abroad are managed centrally.

For such fictitious municipalities, the countingCircleId must be constructed as follows:

<prefix 19>-<cantonal BFS number (2 digits)>-<suffix 0>

Example:

- Swiss voters abroad – Canton of Vaud countingCircleId = 19220

The fictitious municipality identifier:

- must be used consistently across all deliveries;
- must not collide with official municipality identifiers;
- is used exclusively for the aggregation and transmission of results for Swiss voters abroad.
-

5.3.3 Candidates residing abroad (National Council elections)

For National Council elections, candidates may reside abroad.

In such cases, the political domicile (Politischer Wohnsitz, domicile politique, domicilio politico) must be provided in addition to the place of residence abroad.

The political domicile refers to the competent Swiss municipality (or, where applicable, the competent canton in cases where Swiss voters abroad are managed centrally at cantonal level). It identifies the Swiss authority responsible for the candidate's electoral rights.

Providing the political domicile is mandatory for candidates residing abroad.

Transmission of the political domicile

The political domicile must be transmitted using **one of the following two variants**.

Variant 1: Appended to the place of residence (town)

The political domicile may be appended in parentheses to the value of the element town.

In this case, the designation must be provided **in the main language of the canton**.

Examples:

Canton with main language German

<town xmlns="http://www.ech.ch/xmlns/eCH-0010/6">Paris (Politischer Wohnsitz: Genf)</town>

Canton with main language French

<town xmlns="http://www.ech.ch/xmlns/eCH-0010/6">Paris (domicile politique : Genève)</town>

Canton with main language Italian

```
<town xmlns="http://www.ech.ch/xmlns/eCH-0010/6">Paris (domicilio politico: Ginevra)</town>
```

Variant 2: Political domicile as a separate named element

In this variant, the political domicile is transmitted as a separate namedElement at candidate level.

Example

```
<namedElement>
  <elementName>politicalDomicile</elementName>
  <text>Genf</text>
</namedElement>
```

6. Data Transmission and Productive Operation

This chapter describes how data deliveries are transmitted to the federal system and how cantonal systems are expected to behave during **productive operation**.

The federal result transmission process based on eCH-0252 follows the **once-only principle**. Each delivery covers all information needs regarding data transmission at federal level and is processed fully automatically. Data delivered via eCH-0252 is used jointly by the Federal Statistical Office (FSO) and the Federal Chancellery (FCh).

6.1 Transmission Channels and Delivery Conventions

This section summarises the general transmission rules that apply to all eCH-0252 deliveries for federal elections.

Sedex is the **primary and mandatory transmission channel** for all productive data deliveries to the federal receiving system operated by the FSO.

Each delivery must be explicitly marked as either:

- a **test delivery**, or
- a **productive delivery**.

This distinction is controlled via the element **testDeliveryFlag** in the delivery header and is used by the federal receiving system to steer central processing and feedback mechanisms.

General delivery conventions:

- One delivery file corresponds to **one delivery event**.
- For result deliveries, each file must contain results for exactly one federal election. National Council elections and Council of States elections must therefore be transmitted in separate files. For Council of States elections, each election round (e.g. first and second round) is treated as a separate election.

Details on Sedex-specific parameters (receiver ID, accepted message types) are defined in **Chapter 5**.

General principles, requirements and expectations related to test deliveries and the testing phase are described in **Chapter 8 (Test Data and Testing Phase)**.

6.2 Productive Operation Phases

Productive operation for federal elections spans **several weeks** and consists of two clearly distinct phases, each with different requirements.

The productive phase begins with the first productive transmission of election-related data and continues for as long as productive deliveries are expected, including correction deliveries and the transmission of panachage data.

6.2.1 Pre-election phase (informationDelivery)

The pre-election phase covers the period in which **lists, candidates and related metadata** are transmitted to the federal system.

For the Federal Elections 2027, productive operation is expected to begin in **August 2027** with the first productive informationDelivery files.

Key characteristics of this phase:

- Only informationDelivery files are transmitted.
- The focus is on the **registration and validation of election data** (lists, candidates, list unions).
- Deliveries may be repeated to reflect corrections or updates in cantonal systems. Normally, there are at least two informationDeliveries: the first after the final date for submission of candidate lists (Wahlanmeldeschluss, date limite du dépôt des listes de candidats, termine per la presentazione delle proposte) and the second after the rectification period (Bereinigungsfrist, délai pour la mise au point des listes, termine per la modifica).
- Identifier consistency between successive deliveries is essential (see Chapter 5). Changes that affect the communicated IDs must always be delivered with a new information delivery.

From **August 2027 onwards**, **test deliveries must no longer be sent** to the federal receiving system.

Any exceptions must be explicitly coordinated between the canton and the FSO in advance.

Processing of informationDelivery (pre-election phase)

Each informationDelivery transmitted to the federal system is processed as follows:

- Receipt of the delivery via Sedex
- XML schema validation against the eCH-0252 specification
- Additional structural and content validation (e.g. presence and format of mandatory elements and identifiers)
- If validation is successful:
 - election data (lists, candidates, list unions) are processed and made available for use by the Federal Statistical Office (FSO) and the Federal Chancellery (FCh)

- If validation fails:
 - an error report is generated
- In all cases:
 - **automated feedback is generated for each delivery**

6.2.2 Election day phase (resultDelivery)

The election day phase covers the transmission of **election results at municipal level** on election day and, where necessary, in the days following election day.

On election day, **no panachage data must be transmitted**.

Panachage data is not required for election day processing and, due to its volume, poses a potential risk to system performance. For this reason, the transmission of panachage data must be triggered **after election day**, typically on the following Monday.

Key characteristics of this phase:

- Only resultDelivery files are transmitted.
- Results are delivered **per municipality** and **only once counting has been completed**.
- Multiple result deliveries are expected on election day as municipal results become available.
- Corrections or additional data may be transmitted after election day using further resultDelivery files.

During this phase, cantonal systems are expected to:

- transmit results promptly after counting has been completed;
- ensure that all result data reference the identifiers previously delivered via informationDelivery;
- refrain from transmitting panachage data on election day.

Processing of resultDelivery (election day phase)

Each resultDelivery transmitted to the federal system is processed as follows:

- Receipt of the delivery via Sedex
- XML schema validation against the eCH-0252 specification
- Additional structural and content validation
(e.g. completeness and consistency of mandatory elements)
- Automated plausibility checks on result data
- If validation and plausibility checks are successful:
 - results are processed by the FSO
 - municipal results are aggregated and published continuously
- If validation or plausibility checks fail:
 - an error report is generated
- Automated feedback is generated

- Less extensive in terms of content than in the test phase. Only errors are reported back.

Once the result for a canton is **complete**, including the element elected:

- the federal system automatically generates a **PDF report** containing the aggregated cantonal result and the list of elected candidates;
- this report is sent by **e-mail** to the responsible cantonal contact for verification and confirmation.

After the canton has confirmed the result by e-mail:

- the cantonal final result is released in the federal system;
- elected candidates are published.

Timely confirmation on election day is essential to ensure smooth publication of final results.

6.3 Backup and Fallback Scenarios

Despite all preventive measures, exceptional situations may occur during productive operation. This section outlines the expected fallback procedures.

- **Sedex not available**
If Sedex delivery is temporarily not possible, result files may be transmitted as **zipped XML files via e-mail**, subject to cantonal and federal IT security constraints.
- **Cantonal system failure**
In the event of a severe system failure, results may be transmitted **by phone** as an emergency measure. In such cases, processing on the federal side is manual and limited.

Cantons are strongly encouraged to:

- test fallback scenarios in advance;
- define clear internal responsibilities and contact points;
- ensure that fallback procedures are used only in exceptional cases.

7. Automated Feedback

This chapter describes the purpose and general behaviour of the **automated feedback** generated by the federal receiving system in response to incoming eCH-0252 deliveries.

The automated feedback is intended primarily as a **supporting tool for implementation and testing**, helping cantons and software vendors to detect and correct issues early and, to a certain extent, to test their implementations autonomously.

7.1 General Principles

For each incoming delivery, the federal receiving system generates automated feedback.

By default, automated feedback is provided **by e-mail**.

In the course of 2026, automated feedback will be gradually extended:

- to additional delivery types; and
- to further election types, including majoritarian elections.

At a later stage (planned for **2026**), a **machine-readable automated feedback mechanism via Sedex** will also be made available. This mechanism will complement, but not replace, the existing e-mail-based feedback.

7.2 Feedback Behaviour by Phase

The scope and level of detail of automated feedback depend on the operational phase.

During the **implementation and testing phase**, the system is configured to provide **as detailed feedback as possible**. This includes extensive diagnostic information intended to support development, testing and correction of deliveries.

During **productive operation**, the scope of automated feedback is **reduced to what is operationally necessary**. The focus shifts from implementation support to stable and efficient processing of productive data deliveries.

This phased approach ensures that automated feedback supports both the implementation process and reliable productive operation.

8. Test Data Requirements

This chapter defines the **minimum requirements for test data** used in the context of eCH-0252 implementations for federal elections.

It specifies what must be delivered in test deliveries to allow meaningful technical validation by the federal receiving system. It does **not** describe how testing is organised or scheduled, as implementation and testing activities are coordinated individually between the FSO and the cantons.

8.1 General Principles

The following general principles apply to all test deliveries:

- Test deliveries must be clearly marked using `testDeliveryFlag = true`.
- Test data must follow the **same structural and semantic rules** as productive data.
- The use of **complete and coherent test data is strongly encouraged**. Providing data sets that cover the full scope of an election allows cantons and the federal system to simulate election day processing end-to-end and to verify system behaviour once results are complete.

Test deliveries are intended to verify the **technical correctness, completeness and operational behaviour** of an implementation.

8.2 Minimum Test Data Requirements

Test deliveries must cover all **federal-critical elements** required for productive operation.

The minimum scope described below is sufficient to validate a correct implementation of eCH-0252 for federal elections.

8.2.1 Information Delivery

At least one test informationDelivery must be provided and must include:

- All mandatory elements required for federal elections.
- All mandatory identifiers, including `idBund`.

The delivery should, at minimum, contain:

- **Lists**
 - 1–2 lists
- **Candidates**
 - 1–2 candidates per list
- **List unions**
 - 1–2 list unions (where applicable)

The data must be internally consistent and allow unambiguous referencing from subsequent result deliveries.

8.2.2 Result Delivery

At least one test resultDelivery must be provided and must include:

- Results for at least **one municipality**.
- Only **fully counted municipal results**.
- A **simulated complete election result**.

The delivery should include, at minimum:

- Municipal-level results.
- List-level results.
- Candidate-level results.
- The element elected, including elected candidates.

Providing complete result data is particularly valuable, as it allows cantons **and the federal system** to verify that their systems behave correctly once the full result of an election is available.