



## ASSESSMENT SUMMARY v1.0.0

Registered Organization Vocabulary (RegOrg)<sup>1</sup>

World Wide Web Consortium (W3C)<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Registered Organization Vocabulary (RegOrg): <u>https://www.w3.org/TR/vocab-regorg/</u>

<sup>&</sup>lt;sup>2</sup> W3C Organisation: <u>https://www.w3.org/</u>

### **Change Control**

Modification	Details
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Initial version	

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#### **1.** INTRODUCTION

The present document is a summary of the assessment of the **RegOrg** carried out by CAMSS using the CAMSS Assessment EIF scenario<sup>3</sup>. The purpose of this scenario is to assess the compliance of a standard or specification with the European Interoperability Framework (EIF)<sup>4</sup>.

#### **2. Assessment Summary**

The Registered Organization Vocabulary (RegOrg) is a specialised profile of the Organization Ontology, designed to provide a structured, standardised means of describing organisations that have acquired legal entity status through a formal registration process. These registrations typically occur within national or regional business registers, ensuring that essential organisational details are formally recorded and publicly accessible.

RegOrg was initially advanced through the W3C Recommendations Track, marking its formalisation within globally recognised technical standards. It was first introduced as a First Public Working Draft on 8 January 2013<sup>5</sup>, providing an early framework for structured organisational data representation. Subsequent refinements led to its publication as a W3C Note, first on 28 May 2013, followed by another update on 1 August 2013, further solidifying its foundational structure. In addition, various key elements and properties from RegOrg are still being utilised in Open Standards for Linking Organizations (OSLO).

RegOrg is a W3C specification that was initially created by the EC under ISA2. Originally developed under the European Commission's ISA Programme, its publication was supported by the Directorate-General for Internal Market and Services (DG MARKT). According to recent discussions<sup>6</sup> on Core Business Vocabulary Github<sup>7</sup> the W3C has since discontinued the Registered Organization Vocabulary. In response, the community, along with ongoing development efforts, has transitioned to the Core Business Vocabulary, which offers a more extensive and adaptable framework. This shift reflects an evolving need for enhanced interoperability and standardisation, ensuring that business registries and related entities can effectively communicate and exchange critical data within the global digital ecosystem.

<sup>&</sup>lt;sup>3</sup> CAMSS Assessment EIF Scenario: <u>https://ec.europa.eu/eusurvey/runner/CAMSSAssessmentEIFScenario6</u>

<sup>&</sup>lt;sup>4</sup> Isa2 programme website: <u>https://ec.europa.eu/isa2/eif\_en</u>

<sup>&</sup>lt;sup>5</sup> RegOrg First Public Working Draft on 8 January 2013: <u>https://www.w3.org/TR/2013/WD-vocab-regorg-20130108/</u>

<sup>&</sup>lt;sup>6</sup> RegOrg and CBV Issues : <u>https://github.com/SEMICeu/Core-Business-Vocabulary/issues/27</u>

<sup>&</sup>lt;sup>7</sup> Core Business Vocabulary : https://github.com/SEMICeu/Core-Business-Vocabulary

#### 2.1. EIF Interoperability Principles

Interoperability principles are fundamental behavioural aspects that drive interoperability actions. They are relevant to the process of establishing interoperable European public services. They describe the context in which European public services are designed and implemented.

#### The specification does not support the principles setting context for EU actions on interoperability:

#### - Subsidiarity and proportionality

The Registered Organization Vocabulary is not included in any Member States' catalogues of recommended specifications according to the National Interoperability Framework Observatory (NIFO<sup>8</sup>) factsheets.

#### The specification supports the principles setting context for EU actions on interoperability:

#### - Openness

RegOrg provided a structured framework for publishing data on the web, enabling the description of organisations that had acquired legal entity status through formal registration. The W3C established a well-defined development and approval process for specifications as recommended standards, ensuring clarity and transparency. Additionally, a Release Notes archive tracked changes across different versions, while the W3C Royalty-Free IPR licences, granted under the W3C Patent Policy<sup>9</sup>, applied to all W3C specifications, including the Registered Organization Vocabulary.

However, recent discussions on the Core Business Vocabulary GitHub<sup>10</sup> confirm that W3C has discontinued the RegOrg. The development and community efforts have since transitioned to the Core Business Vocabulary, which provides a broader and more adaptable framework for describing organisations at a structural and operational level. While W3C no longer maintains RegOrg, its previous releases and related information remain accessible via the W3C Working Group page<sup>11</sup>.

#### - Transparency

RegOrg enables the visibility of administrative procedures, regulations, and public services by providing a structured framework for describing legally registered organisations. Despite no

<sup>&</sup>lt;sup>8</sup> National Interoperability Framework Observatory Factsheets:

<sup>&</sup>lt;u>https://interoperable-europe.ec.europa.eu/collection/nifo-national-interoperability-framework-observatory/digital-public-administration-factsheets-2024</u>

<sup>&</sup>lt;sup>9</sup> W3C Patent practice: <u>https://www.w3.org/TR/patent-practice#ref-AC</u>

<sup>&</sup>lt;sup>10</sup> Core Business Vocabulary Github reference: <u>https://github.com/SEMICeu/Core-Business-Vocabulary/tree/master</u>

<sup>&</sup>lt;sup>11</sup> RegOrg W3C Working Group: <u>https://www.w3.org/2011/gld/wiki/Main\_Page</u>

longer being actively maintained, RegOrg remains in use, particularly within the Open Standards for Linking Organisations (OSLO<sup>12</sup>) framework, notably in the application profile of "Slimme Stadsdistributie"<sup>13</sup>.

The "Slimme Stadsdistributie" application profile reuses key terms from RegOrg to represent the fundamental concept of a Geregistreerde Organisatie and its essential attributes, including its registration identifier and legal name. This semantic consistency ensures a shared understanding of what constitutes a registered organisation in the context of smart urban distribution.

Furthermore, RegOrg supports the exposure of interfaces that facilitate access to public administrative services. For example, within the "Slimme Stadsdistributie" profile, one use case is the ability to retrieve mobility permit data issued by an administration. The vocabulary enables users to identify the Registered Organisation holding the permit and determine its legal name, simply by following the definitions and structured properties provided.

#### - Reusability

The Registered Organization Vocabulary's usability extends beyond business domains to include any organisation that gains legal entity status through a formal registration process. As a profile of the W3C Organization Ontology<sup>14</sup>, the Registered Organization Vocabulary inherits the ontology's agnostic nature, enabling flexible and interoperable representation of registered organisations while maintaining alignment with broader organisational modelling frameworks.

#### - Technological neutrality and data portability

RegOrg provides a structured framework for describing legally registered organisations, ensuring interoperability across different technologies and platforms. While RDF<sup>15</sup> and XML<sup>16</sup> are the preferred encoding formats, the vocabulary does not mandate their use, allowing for implementation across various technologies.

RegOrg offers a flexible approach that does not require full adoption of all defined terms. Organisations can implement only the relevant aspects suited to their specific data exchange scenarios. Additionally, it supports customisation through application profiles, enabling adaptation to specialised requirements by incorporating external vocabularies and introducing additional rules and terms.

<sup>&</sup>lt;sup>12</sup> Open Standards for Linking Organisations (OSLO):

https://www.vlaanderen.be/digitaal-vlaanderen/onze-diensten-en-platformen/oslo

<sup>&</sup>lt;sup>13</sup> OSLO Smart City Distribution - Application profile Reference: <u>https://data.vlaanderen.be/doc/applicatieprofiel/slimme-stadsdistributie/</u>

<sup>&</sup>lt;sup>14</sup> W3C Organization Ontology: <u>https://www.w3.org/TR/vocab-org/</u>

<sup>&</sup>lt;sup>15</sup> Resource Description Framework (RDF): <u>https://www.w3.org/RDF/</u>

<sup>&</sup>lt;sup>16</sup> Extensible Markup Language (XML): <u>https://www.w3.org/XML/</u>

Designed with extensibility in mind, RegOrg allows for the integration of terms from other vocabularies and the creation of new classes and properties, ensuring adaptability to evolving data needs. RegOrg shares foundational principles with the SEMIC Core Business Vocabulary (CBV), which defines key attributes of legally registered entities to facilitate structured and efficient data exchange.

#### The specification partially supports the principles related to generic user needs and expectations:

#### - User-centricity

RegOrg is designed to allow for reuse of relevant information. As an example, a case of reuse is the utilisation of the "adms:Identifier" class from the Asset Description Metadata Schema (ADMS)<sup>17</sup> to represent legal and other identifiers associated with a registered organisation.

#### - Inclusion and accessibility

The purpose of Registered Organization Vocabulary does not enable the e-accessibility. Therefore, this criterion is not applicable to this specification.

#### - Privacy

RegOrg is designed to facilitate interoperability and structured data exchange. In this sense, the specification is not intended to ensure the protection of personal data managed by public administrations, neither restricting access to information or data.

In addition, RegOrg is not part of any European or national initiative related to privacy regulations, as its primary role remains focused on capturing essential attributes of formally registered organisations within national or regional business registers.

#### - Security

RegOrg provides a standardised framework for describing legally registered organisations. It does not handle secure data exchange, guarantee authenticity, or include access control features. Its focus is on structuring organisational information, not verifying identity or transactional integrity.

In this context, RegOrg does not protect against unauthorised changes or ensure data accuracy. It offers an extensible model for describing registered organisations without enforcing data integrity mechanisms. Therefore, criteria related to security, authenticity, and access control are not applicable to this specification.

#### - Multilingualism

Registered Organization Vocabulary facilitates usage in multilingual contexts through its handling of legal names. By using the appropriate tags and properties, the specification acknowledges that a business might have more than one legal name, particularly in countries with multiple official

<sup>&</sup>lt;sup>17</sup> Asset Description Metadata Schema (ADMS): <u>https://www.w3.org/TR/vocab-adms/</u>

languages, and therefore recommends that the language of each legal name string should be identified.

#### The specification supports the foundation principles for cooperation among public administrations:

#### - Administrative Simplification

The Registered Organization Vocabulary plays a vital role in facilitating information exchange between business registers, improving interoperability across the European public services that depend on structured data about registered organisations. It also promotes the reuse of European vocabularies, such as ADMS, enhancing metadata management, ensuring semantic consistency, and supporting the discoverability and interoperability of organisational data across different systems.

#### - Preservation of information

Registered Organization Vocabulary does not enable the long-term preservation of data/information/knowledge (electronic records included). The main purpose of the specification is to define a standardised way of describing organisations that have gained legal entity status through a formal registration process. Therefore, this criterion is considered not applicable to this specification.

#### - Assessment of effectiveness and efficiency

Registered Organization Vocabulary is a vocabulary built on established standards to facilitate interoperability. However, the inherent characteristics of RDF and the development of Core Business Vocabulary (CBV) suggest that there were areas where the approach could be further optimised for broader and more efficient data modelling of legal entities.

While is true that Core Business Vocabulary (CBV) gained more popularity on European aspects, the Registered Organization Vocabulary achieved W3C Recommendation status in 2013 indicates that it underwent a rigorous review process by the semantic web community and was deemed a sound and effective specification at that time.

Moreover, the fact that CBV built upon the foundations of Registered Organization Vocabulary implies that the core concepts and design principles of Registered Organization Vocabulary were considered valuable and effective enough to be carried forward.

#### **2.2. EIF Interoperability Layers**

The interoperability model which is applicable to all digital public services includes:

- Four layers of interoperability: legal, organisational, semantic and technical;
- A cross-cutting component of the four layers, 'integrated public service governance';
- A background layer, 'interoperability governance'.

# The Specification supports the implementation of digital public services complying with the EIF interoperability model:

#### - Interoperability governance

Registered Organization Vocabulary is associated to "Controlled Vocabulary", "Data", "Data Model", "Hash Code", "Linked Data", "Linked Open Data", "Metadata" and "Open Data" ABB under the Semantic view in the EIRA Library of Interoperability Specifications (ELIS)<sup>18</sup>.

Registered Organization Vocabulary lacks a formal conformance tool, though it defines conformance based on semantic accuracy and vocabulary prioritisation. RegOrg was originally developed under the ISA Programme to support interoperability.

However, recent discussions on the CBV GitHub confirm that W3C has discontinued RegOrg, with its development and community efforts transitioning to the Core Business Vocabulary (CBV). A review of catalogues found no evidence of RegOrg being formally included in Member States' recommended specifications or recognised at a European supra-national level.

Despite this, the Belgian Interoperability Framework (Belgif) includes the OSLO framework, which is used for semantic interoperability in Belgium. Within OSLO, various key elements and properties from RegOrg are still being utilised.

#### - Legal Interoperability

While Registered Organization Vocabulary became a W3C Recommendation, its origins lie within the European Commission's ISA Programme, aimed at the interoperability within European public administrations. Additionally, its integration with Asset Description Metadata Schema (ADMS) ensures robust metadata management, facilitating discoverability and semantic consistency across organisational data frameworks in Europe.

However, according to recent discussions on the CBV GitHub, W3C has discontinued the Registered Organization Vocabulary and the community along with the continuation for the development moved to the Core Business Vocabulary.

<sup>&</sup>lt;sup>18</sup> EIRA Library of Interoperability Specifications (ELIS): <u>https://joinup.ec.europa.eu/collection/common-assessment-method-standards-and-specifications-camss/solution/elis/release/v610</u>

#### - Organisational interoperability

Registered Organisation Vocabulary plays a key role in business process modelling by providing a structured way to describe the characteristics and registration details of legal entities. This facilitates seamless data exchange between business registers, ensuring clarity and consistency across different systems.

Additionally, RegOrg enhances organisational interoperability agreements by offering a common vocabulary and a consistent semantic framework for describing legally registered organisations. By standardising terminology and data structures, it enables business registers and other entities to exchange information in a uniform and interoperable manner, improving efficiency and cross-system communication.

#### - Semantic Interoperability

Registered Organization Vocabulary specification provides a standardised vocabulary for describing organisations, facilitating data exchange and interoperability, particularly within the European context. Its successor, CBV, is now the more actively supported specification for this purpose, encouraging data sharing and the creation of communities on national and European platforms.

#### **3.** Assessment Results

This section presents an overview of the results of the CAMSS assessments for **RegOrg**. The CAMSS "Strength" indicator measures the reliability of the assessment by calculating the number of answered (applicable) criteria. On the other hand, the number of favourable answers and the number of unfavourable ones is used to calculate the "Automated Score" per category and an "Overall Score".

Category	Automated Score	Assessment Strength	Compliance Level
EIF Principle setting the context for EU actions on interoperability	20/100 (20%)	100%	Ad-hoc
Core interoperability principles	1540/1700 (91%)	100%	Seamless
Principles related to generic user needs and expectations	1200/1200 (100%)	33%	Seamless
Foundation principles for cooperation among public administrations	420/500 (84%)	100%	Seamless
Interoperability layers*	800/1000 (80%)	100%	Sustainable
Overall Score	2780/3300 (84%) <sup>19</sup>	82%	

\*The technical interoperability layer is covered by the criteria corresponding to the core interoperability principle "Openness".

With an 100% of assessment strength, this assessment can be considered representative of the specification compliance with the EIF principles and recommendations.

The Overall Automated Score of 84% (2780/3300) demonstrates that the specification supports the European Interoperability Framework in the domains where it applies.

<sup>&</sup>lt;sup>19</sup> See the "results interpretation" section of the CAMSS Assessment EIF Scenario Quick User Guide:

https://joinup.ec.europa.eu/collection/common-assessment-method-standards-and-specificationscamss/solution/camss-assessment-eif-scenario/results-visualisation-and-interpretation