UDC [81’373.46+81’25]:[111+004.8]
DOI https://doi.org/10.32782/2522-4077-2026-218-2

THE TRANSLATION-STUDIES DIMENSION OF ONTOLOGISING TERMINOLOGICAL DEFINITIONS: TERM EQUIVALENCE UNDER CONCEPT-SYSTEM INCOMMENSURABILITY

ПЕРЕКЛАДОЗНАВЧИЙ ВИМІР ОНТОЛОГІЗАЦІЇ ТЕРМІНОЛОГІЧНОЇ ДЕФІНІЦІЇ: ЕКВІВАЛЕНТНІСТЬ ТЕРМІНА ЗА НЕСПІВМІРНОСТІ ПОНЯТТЄВИХ СИСТЕМ

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Drawing on verifiable textual material, the article establishes what the ontologisation of a terminological definition amounts to and what consequences it has for interlingual equivalence between English-language industrial resources and Ukrainian terminological codification. The material comprises four types of resources that codify the same subject field – oil-and-gas surface equipment – under four different regimes of definition-making: a formal ontology (the PCA PLM Reference Data Library, built on ISO 15926-14 / Industrial Data Ontology), a standardised data dictionary (CFIHOS v2.0), a professional glossary (the SLB Energy Glossary), and Ukrainian national terminological standards (ДСТУ 3809-98, ДСТУ 3063-95, ДСТУ 2611-94). A core sample of twenty concepts was coded against nine parameters: definition type, genus, explicit top-level categories, life-cycle markers, mode of fixing relations, functional component, inter-version shift, type of interlingual equivalence, and source of equivalence. It was established that, on definition pairs with shared wording, ontologisation reduces to a substitution in the genus slot while the differentia remains invariant, and that the operation is graded: from zero intervention through a bare category swap to full substitution with a functional genus. Life-cycle markers were shown to be removed at the very first step of standardisation and inherited thereafter in de-temporalised form, while the coverage of a resource was shown to follow its purpose rather than its subject field. A typology of equivalence asymmetries was substantiated: the chain of equivalence declared by the resources themselves closes at the level of the term and breaks at the level of the concept. The initial hypothesis was refined: ontological commitments define the boundaries of the possible definitional space, while the filling of that space remains with the compiler. Prospects are outlined: an audit of definitional quality in machine-readable terminological resources, a diachronic study of inter-version definitional shift, and a full typology of translation asymmetries.

Key words: terminological definition, industrial ontology, ISO 15926, genus, interlingual equivalence, translation studies.

У статті на основі відтворюваного й доступного для перевірки текстового матеріалу досліджено, у чому полягає онтологізація термінологічної дефініції та які наслідки вона має для міжмовної еквівалентності між англомовними промисловими ресурсами й українською термінологічною кодифікацією. Матеріалом слугували чотири типи ресурсів, що кодифікують ту саму предметну ділянку – нафтогазове поверхневе обладнання – в межах чотирьох різних режимів дефініціювання: формальна онтологія (PCA PLM Reference Data Library, побудована на основі ISO 15926-14 / Industrial Data Ontology), стандартизований словник даних (CFIHOS v2.0), фаховий глосарій (SLB Energy Glossary) та національні термінологічні стандарти (ДСТУ 3809-98, ДСТУ 3063-95, ДСТУ 2611-94). Ядерну вибірку з двадцяти понять закодовано за дев’ятьма параметрами: тип дефініції, родове поняття, експліцитні категорії верхнього рівня, маркери життєвого циклу, спосіб фіксації відношень, функційний компонент, міжверсійний зсув, тип міжмовної еквівалентності та джерело еквівалентності. Установлено, що на парах дефініцій зі спільним формулюванням онтологізація

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зводиться до субституції родового поняття за незмінної видової відмінності і є градуйованою операцією: від нульового втручання через заміну самої лише категорії до повної субституції з функційним родовим поняттям. Показано, що маркери життєвого циклу усуваються вже на першому кроці стандартизації й далі успадковуються в детемпоралізованому вигляді, а межі покриття ресурсу визначаються його призначенням, а не предметною ділянкою. Обґрунтовано типологію асиметрій еквівалентності: ланцюг еквівалентності, задекларований самими ресурсами, замикається на рівні терміна й розривається на рівні поняття. Уточнено вихідну гіпотезу: онтологічні зобов'язання визначають межі можливого дефініційного простору, тоді як конкретне заповнення цього простору лишається за укладачем. Окреслено перспективи подальших досліджень: аудит дефініційної якості машиночитних термінологічних ресурсів, діахронічний аналіз міжверсійних дефініційних зсувів, повна типологія перекладацьких асиметрій.

Ключові слова: термінологічна дефініція, промислова онтологія, ISO 15926, родове поняття, міжмовна еквівалентність, перекладознавство.

Problem statement. Terminological definitions have quietly acquired a second reader. For decades a definition addressed a human specialist; today, in industrial ontologies and standardised data dictionaries, the same sentence must also serve a reasoning machine. ISO 15926 – the standard family for the integration of life-cycle data of process plants – is where this double addressing is most consequential: its reference data libraries define thousands of equipment concepts, and those definitions coexist with formal axioms that a reasoner treats as the concept itself. The ontologisation of a definition selectively preserves, rewrites, and removes its components; this study identifies which. A further consequence, central to translation studies, concerns what this transformation does to interlingual equivalence, when a national codification such as the Ukrainian ДСТУ declares its terms equivalent to English ones whose conceptual environment has meanwhile been rebuilt?

These questions are answerable, because the resources involved are unusually transparent: they share wording, declare their own cross-references, and document their own editorial decisions. Yet they have not been asked. Terminological scholarship on the oil-and-gas domain, in Ukraine and beyond, continues to operate at the level of the term – its translation, its variation, its polysemy – while the definition as a structure, and the concept system behind it, remain outside the frame. The present study shifts that frame.

Analysis of recent research and publications. The current Ukrainian state of the art is best represented by Shtohryn [1, p. 99–103], who examines the translation of oil-and-gas terms and term collocations on the material of a well-control textbook and its Ukrainian rendering, building a typology of adaptation methods and lexical-semantic transformations – transliteration, calquing, explication, concretization – and analysing inter– and intra-domain homonymy (bearing, mud motor). The unit of analysis throughout is the term as a lexical item; the difficulty studied is the choice of an equivalent. This is precisely the boundary the present study crosses: our unit is the definition (genus, differentia, hierarchical position), and our difficulty is the incommensurability of concept systems under perfectly available equivalents – a configuration for which the transformational apparatus has, by design, no instruments, because nothing needs to be transformed: the words match and the systems do not.

On the resource side, the primary documentation of the PCA PLM Reference Data Library (ISO 15926-14 / Industrial Data Ontology) [2], of CFIHOS v2.0 (IOGP JIP36) [3], and of the SLB Energy Glossary [4] describes what these resources contain, but none of it analyses their definitional practices as an object; the terminological principles of ISO 704 [5, 6.4, p. 34] and ISO 1087 [6, 3.3.2], meanwhile, describe how definitions ought to be built, not what machine-readable resources actually do to them. The academic literature, for its part, frames our object from two sides without meeting in the middle. On the ontology side, Batres et al. [7] remain the canonical account of the upper ontology and the four-dimensional commitments of ISO 15926 – written, notably, before the turn to the Industrial Data Ontology that our parameter P7 is designed to track. On the localization side, the notion of ontology localization received its definitional treatment in Cimiano et al. [8, p. 127–137], and the last substantial contribution to that line – McCrae et al. [9] on domain adaptation for ontology local-

ization – dates from 2016; the decade of near-silence since is itself the strongest evidence for H2. Between the prescriptive norm, the engineering documentation and these two unconnected strands lies a gap: no study, to our knowledge, has juxtaposed the definitional practices of an ontology, a data dictionary, a glossary and a national codification on shared material – and none has done so with Ukrainian as one of the poles.

The aim is to establish, on verifiable textual material, what the ontologisation of a terminological definition amounts to, and what consequences it has for interlingual equivalence between English-language industrial resources and Ukrainian codification. Tasks: (1) to code a core sample of 20 equipment and process concepts across four resources – a formal ontology (PCA PLM RDL), a data dictionary (CFIHOS v2.0), a professional glossary (SLB), and Ukrainian state standards (ДСТУ 3809-98 [10], 3063-95 [11], 2611-94 [12]) – against nine parameters (P1–P9); (2) to identify the textual mechanism of ontologisation on pairs with shared wording; (3) to trace the fate of lifecycle markers and domain coverage across the four regimes; (4) to build a typology of equivalence asymmetries grounded in the resources' own declared cross-references. Two hypotheses are tested as originally formulated. H1: the definitional differences between the ontology and traditional glossaries are systematic, measurable, and motivated by the explicit ontological commitments of the respective version of the standard – and not by the editorial style of the compilers. H2: the localization of industrial ontologies into Ukrainian remains an unexamined problem, the study of which requires precisely the definitional (not term-level) frame developed here.

Presentation of the main research material.

Materials and methods

Comparing definitions across resources is meaningful only if the resources are genuinely comparable: same domain, same concepts, different regimes of definition-making. The material was assembled around exactly that contrast. The study juxtaposes four types of terminological resources that codify the same domain – oil-and-gas surface equipment – under four different regimes of definition-making:

(1) a **formal ontology**: the PCA PLM Reference Data Library, built on ISO 15926-14 / Industrial Data Ontology (modules *equipment* and *process*, versionInfo 0.9.1; dcterms:modified 2022-09-26; CC BY-SA 4.0; accessed 15–18.07.2026). A documented inconsistency of the resource itself must be noted: in the Turtle serialisation at .../ont/equipment/0.9.0/plm-equipment.ttl, owl:versionIRI declares 0.9.0 while owl:versionInfo in the same file declares "0.9.1", whereas the generated HTML module page presents 0.9.1 in both fields;

(2) a **standardised data dictionary**: CFIHOS RDL v2.0 (IOGP JIP36, November 2025), 923 equipment classes with definitions, parent classes and unique codes; the working extraction was obtained from a relational representation (SQLite, SHA-256 71c2990c…9309e99); the working fingerprint is given for exact reproducibility, and independent cross-checking of this extraction against the official distribution is listed among the limitations of the study;

(3) a **professional glossary**: the SLB Energy Glossary (glossary.slb.com, accessed 18.07.2026);

(4) **national terminological codification**: ДСТУ 3809-98 «Компресори. Терміни та визначення», ДСТУ 3063-95 «Насоси. Класифікація. Терміни та визначення», ДСТУ 2611-94 «Арматура трубопровідна загальнопромислового призначення. Терміни та визначення» (the latter confirmed as currently valid). These standards carry auxiliary Russian-language layers; the present study analyses exclusively their Ukrainian-language layer, with the auxiliary English equivalents used as declared equivalence data.

A core sample of 20 concepts was coded against nine parameters. The 17 artefacts are compressor, pump, valve, separator, heat exchanger, pipeline, manifold, nozzle, centrifugal compressor, centrifugal pump, gate valve, three-phase separator, christmas tree, riser, choke valve, pipe pig and pig trap; the three activities – compression, pumping and gas liquid separation – are paired with compressor, pump and separator respectively, to test the ontology's declared artefact–function–activity pattern.

Seven of them are terminological: definition type (P1), genus (P2), explicit top-level categories (P3), life-cycle markers (P4), mode of fixing relations (P5), functional component (P6), and inter-version shift (P7). The remaining two carry the translational dimension of the study. P8 records the type of interlingual equivalence – full, partial-generic, partial-structural, zero, or asymmetric. P9 records its source: declared by the resource itself, as in the auxiliary *en* field of a ДСТУ or a skos:closeMatch link in the RDL, or established by the researcher. The distinction matters, because wherever P9 is coded as "declared", the asymmetry we describe is not our construct but a documented property of the resources. Every record carries a full text, a locator, and an access date; DSTU definitions are cited in the original with an English gloss, since translating them would pre-empt the very decisions under analysis.

A note on the status of the sample – and of the claims. The core sample is diagnostic rather than statistical: twenty concepts suffice to expose mechanisms on fully verifiable material, not to estimate frequencies. The claims of this article accordingly rest on three different empirical bases and should be read at three different scopes, corresponding to the three sections that follow. Claims about the mechanism of ontologisation rest on verbatim-shared definition pairs and are existential – the mechanism exists and operates thus. Claims about coverage do not rest on the sample at all, but on complete inventories: the full module list and class inventory of the PLM RDL, all 923 equipment classes of CFIHOS, and full-text searches of the ДСТУ standards. Claims about equivalence asymmetries are typological; the typology is offered as an instrument, and its distributional validation on a larger sample is explicitly reserved for further work.

The mechanism of ontologisation: genus substitution

What does it actually mean to "ontologise" a definition? The two resources themselves offer an unusually clean answer, because for several concepts they share the wording of the definition verbatim – which turns every remaining difference into evidence. For *compressor*:

– CFIHOS-30000524: A **physical object** *that is driven by a prime mover by which energy is either constantly or periodically added to an amount of gas in order to increase its pressure*.

– PCA_100001002: A **'gas pressure increase device' and an 'artefact'** *that is driven by a prime mover by which energy is either constantly or periodically added to an amount of gas in order to increase its pressure*.

A side-by-side reading of the two texts makes the operation visible. The differentia is untouched. Only the genus slot has been rewritten. Ontologisation here is not a rewriting of the definition but a **substitution of its genus**: a common-language hyperonym gives way to categories of the upper ontology – one of which, 'gas pressure increase device', does not itself exist as a class of the resource.

Verified pairs show that this operation is not uniform but **graded**:

CFIHOS ↔ PCA pair	Differentia	Genus	Degree of intervention
valve (CFIHOS-30000660 / PCA_100004125)	identical	fluid regulator = fluid regulator	zero – inherited untouched
christmas tree (CFIHOS-30000494 / PCA_100005886)	identical	physical object → 'artefact'	minimal – category swap only
compressor (CFIHOS-30000524 / PCA_100001002)	identical	physical object → 'gas pressure increase device' + 'artefact'	full – category + functional genus

Three degrees, one invariant: **the differentia is never modified**. The entire work of ontologisation is concentrated in the genus slot. This yields a measurable scale for P2, and it reframes the relation between the two resources – not systematic re-definition, but **inheritance with selective intervention**. One caution is in order. The direction of borrowing cannot be asserted, since the shared differentiae may descend from a common ancestor in the legacy RDL. The claim defended here is strictly this: the resources share their differentiae verbatim and diverge in their genera.

The Ukrainian codification supplies a third genus for the same concept – and it is structurally different from both. ДСТУ 3809-98 [10, 3.1, p. 2] defines компресор as «енергетична машина або пристрій для створення тиску та переміщення газів або їхніх сумішей» [‘an energy machine **or** a device for creating pressure and moving gases or their mixtures’]. Two things are remarkable here. The genus is **disjunctive** – “machine or device” – a form inexpressible in the genus position of an OWL definition without an explicit unionOf axiom. And the differentia is purely **teleological**, stating what the artefact is for, where all three English-language resources encode mechanism (“driven by a prime mover…”). One term pair, one shared concept, three incommensurable genera: the configuration to which the translational analysis below returns.

What standardisation removes first: life-cycle markers and the profile of coverage

A definition does not only say what a thing is; it quietly decides *when* the thing is what it is. This temporal layer turns out to be the first casualty of standardisation.

Consider the Christmas tree – the assembly of valves installed on a well after completion. The professional glossary anchors the artefact to a stage of the well’s life twice over: SLB defines it as an assembly of valves, spools, pressure gauges and chokes fitted to the wellhead of a **completed well** to control **production** (glossary.slb.com, accessed 18.07.2026). Now compare the two standards. CFIHOS: A physical object that is an assembly of pipes and piping parts, with valves and associated control equipment that is connected to the top of a wellhead and is intended for control of fluid from a well (CFIHOS-30000494). PCA: An ‘artefact’ that is an assembly of pipes and piping parts… – and then, word for word, the same text (PCA_100005886). Both stage markers are gone, and they are gone already at the data-dictionary step; the ontology merely inherits the de-temporalised wording and swaps the genus, exactly as in the genus analysis above. The pattern repeats for *wellhead*: SLB ties it to “pressure control of a **production** well”, while the CFIHOS definition carries no stage marker at all. Two independent concepts, the same direction of loss. The glossary encodes the life cycle; the standards silently remove it – a finding directly relevant to P4, and an ironic one for a standard family whose declared subject is *life-cycle* information integration.

Coverage tells the same story on a larger scale. Track a single well-specific concept, *choke* – lexicalised by the standards as *choke valve* – across all four resources: the glossary defines it (a device incorporating an orifice that is used to control fluid flow rate or downstream system pressure); CFIHOS holds a class for it (CFIHOS-30000812); PCA holds a class for it (PCA_100005885); the Ukrainian general-industrial valve standard does not mention it at all – a full-text search of ДСТУ 2611-94 returns zero hits for the concept under any candidate designation. Present, present, present, absent. The gradient is not a defect of the Ukrainian standard; it is the visible edge of its purpose. A codification of *general-purpose* industrial valves ends precisely where oil-and-gas specificity begins – just as the PLM RDL, whose own metadata declares its subject to be the *chemical plant* (dcterms:subject), ends where the well begins.

And when a well-side artefact does cross the boundary, the ontology admits it only half-way. The PCA class Christmas Tree carries a definition and a superclass (‘Artefact’) – but its constraints section is empty. The functional axiom hasFunction some (realizedIn only X), the very pattern the equipment module announces as its purpose (“Demonstrates assignment of (only) function to generic equipment classes”), is not applied to it, for a structural reason: the process module contains no well-related activity that could stand in the X position. The artefact is admitted; the function it exists for cannot be stated. The boundary of a resource, then, runs not along its list of classes but along its capacity to say about a class the very thing the resource exists to say.

The translational dimension: equivalence of terms, incommensurability of systems

Where does all this leave the translator? In a curious position: the equivalences are impeccable, and almost everything behind them diverges.

Before the cases, one word of method. *Incommensurability* is used throughout as an analytic category with fixed operational content, not as a figure of speech. Two concept systems are incommen-

surable with respect to a term pair when the resources themselves declare the terms equivalent while at least one of the following diverges: the genus assigned to the concept (P2); the lexicalisation of the generic level; the motivational axis of the term's inner form; or the term's hierarchical position (the partial-generic and partial-structural values of P8). Every case below instantiates at least one of these four divergences, and each divergence is documented in the resources' own text.

Begin with what the resources themselves declare. ДСТУ 3809-98 attaches the auxiliary equivalent *en compressor* to компресор; PCA attaches skos:closeMatch to the CFIHOS class *compressor*. The chain ДСТУ → en → CFIHOS/PCA closes without friction at the level of the term – and, as the analysis of genus substitution has shown, opens onto three incommensurable genera at the level of the concept. This is the core configuration of the material, and it is measurable: on parameter P8 the pair компресор ↔ compressor codes as **partial-generic** equivalence (term equivalent, genus divergent), with P9 = *declared by the resources themselves* – the asymmetry is not a construct of the analyst but a property the resources jointly exhibit.

The valve field takes the divergence one level deeper, into the term's inner form. ДСТУ 2611-94 organizes the field by the **kinematics of the closing element**: засув – «перекривальний (регулювальний) елемент переміщується упоперек до осі потоку робочого середовища» ['the closing (regulating) element moves across the axis of the flow'] [12, entry 26, p. 11]; клапан – the element moves «зворотно-поступально … паралельно до осі потоку» ['reciprocally … parallel to the flow axis'] [12, entry 31, p. 12]; затвор – it rotates «навколо осі, що не є його власною віссю» ['around an axis that is not its own'] [12, entry 29, p. 12]; кран – it turns «довкола власної осі» ['around its own axis'] [12, entry 44, p. 16]. Four terms, four values of a single kinematic feature matrix. The English designations for the same four artefacts are motivated by **image and shape**: *gate*, *globe*, *butterfly*, *ball/plug*, *cock*. The equivalence *gate valve* ↔ *засув* is flawless – and the target term contains no trace of "valve", while the source term contains no gate. On P8 this is a case of its own: terms fully equivalent, **motivation incommensurable**.

Interestingly, the incommensurability lives in the terms, not necessarily in the definitions. The PCA definition of Globe Valve describes the closure member "operating with linear motion normal to the flat or shaped seat" (PCA_100005933) – kinematics again, only measured from the seat rather than from the flow axis. The same geometry, two frames of reference: the Ukrainian standard measures from the flow, the ontology from the component. Definitional practices can converge to within a choice of coordinate system even where naming practices remain worlds apart.

Two further asymmetries complete the typology. First, the **generic level itself is lexicalised asymmetrically**: English *valve* is a countable noun naming a concrete device, whereas Ukrainian арматура is a collective noun that names no individual artefact – the four species stand side by side with no one-word genus above them. The standard registers this itself: for клапан it lists two English equivalents, the specific *globe valve* and the generic *valve*, conceding that the Ukrainian lexeme covers both levels at once (and, in passing, it bans the most frequent everyday word of the field: «клапан (Нд вентиль)»). The English-language data dictionary, facing the same slot from the other side, is compelled to fill it – CFIHOS's *valve* class exists, by the resource's own admission, "to maintain hierarchy". One structural gap, two opposite solutions. Second, **hierarchical position** itself can diverge under perfect term equivalence: відцентровий турбокомпресор sits four definitional steps below компресор in ДСТУ 3809-98, while its declared equivalent Centrifugal Compressor is not a subclass of Compressor in the PLM RDL at all – it hangs under the administrative node Rotating Equipment. On P8: **partial-structural** equivalence.

Full, partial-generic, partial-structural, zero, asymmetric: the five values of P8 are not a taxonomy imposed on the material but the shortest description of what the four resources, read together, actually do to one another. The chain of equivalence closes at the level of the term and breaks at the level of the concept – and every break is documented by the resources themselves.

Limitations and alternative explanation. One objection deserves to be met head-on. The Ukrainian standards analysed here date from 1994–1998 and belong to a paper-era paradigm of codification, while CFIHOS and the PLM RDL are products of the 2020s. Could the asymmetries described

above be an artefact of a thirty-year technological gap rather than properties of definitional regimes? Two answers. First, the central mechanisms of this study are established inside the modern English-language resources themselves: the de-temporalisation of christmas tree and wellhead occurs between the SLB glossary and CFIHOS – two contemporary resources – and genus substitution occurs between CFIHOS and the PLM RDL. The Ukrainian pole contributes the equivalence data, not the evidence for these mechanisms. Second, for the translational dimension the gap is not noise but the object itself: ДСТУ 2611-94 is confirmed as currently valid, so the working environment of today's translator is precisely this configuration – living machine-readable resources on one side, valid paper-era codification on the other. The article describes a synchronic normative state composed of diachronically heterogeneous but simultaneously valid resources; that heterogeneity is a property of the translation situation, not a flaw of the research design. Third, the CFIHOS material was drawn from a fingerprinted relational mirror of the official distribution; independent cross-verification of that mirror has not yet been performed, and we state this openly rather than assume it.

Conclusions. First, the mechanism. Where the data dictionary and the ontology share the wording of a definition verbatim, ontologisation reduces to a substitution in the genus slot: the differentia is never touched. The operation is graded – zero intervention (valve), category swap (christmas tree: physical object → 'artefact'), full substitution with a functional genus (compressor) – which turns "ontologisation" from a metaphor into a measurable value of P2.

Second, the temporal layer and the boundary of coverage. Life-cycle markers are removed at the first step of standardisation and never return: the glossary anchors christmas tree and wellhead to the completed and producing well; the data dictionary and the ontology inherit de-temporalised wording. Coverage, in turn, follows purpose, not domain: the concept choke is present in the glossary, the data dictionary and the ontology, and absent from the general-industrial Ukrainian standard – while the ontology, whose declared subject is the chemical plant, admits the christmas tree as a class but cannot assign it the very function-axiom the module exists to demonstrate. The boundary of a resource runs along its capacity to say about a concept the thing it was built to say.

Third, the translational finding. The chain of equivalence declared by the resources themselves – ДСТУ's auxiliary en field, the RDL's skos:closeMatch – closes at the level of the term and breaks at the level of the concept: компресор ↔ compressor is flawless while its three genera are mutually incommensurable; засув ↔ gate valve is flawless while Ukrainian motivates the field kinematically and English by image; відцентровий турбокомпресор ↔ centrifugal compressor is flawless while one sits four definitional steps below its base term and the other is not its subclass at all. The five-value typology of P8 (full / partial-generic / partial-structural / zero / asymmetric) is the shortest description of these documented breaks.

Fourth, the hypotheses. The measurable part of H1 is confirmed. Its final clause is not: within a single module, under identical ontological commitments, definitional practice splits along editorial lines. The corrected formula we propose is stronger than the original claim: *ontological commitments define the boundaries of the possible definitional space; how that space is filled remains with the compiler.* H2 is confirmed by the state of the literature itself. The refined formula also has an applied edge: if the filling of the definitional space remains with the compiler, then a non-reducible human residue persists inside even the most rigid formal systems – a factor any programme of full software conformance to such standards will have to reckon with.

The material opens four lines of further work, which we name explicitly: an audit of definitional quality in machine-readable terminological resources (empty definition slots, template artefacts, non-existent genera); a diachronic study of definitional shift between the 4D legacy RDL and the IDO-based version, including the documented category crossing property → activity; a full typology of translation asymmetries across the entire core sample, including the prescriptive «Нд» corpus against the graded synonymy of skos matching; and the presentation of genus substitution as a general mechanism of ontologisation for the international terminology community, with Ukrainian codification as a fourth, structurally distinct pole.

BIBLIOGRAPHY:

1. Штогрин М. В. Переклад термінів та термінологічних словосполучень у сфері нафтогазової промисловості: методи адаптації, мовні трансформації, міжгалузева та внутрішньогалузева омонімія. *Наукові записки Національного університету «Острозька академія»: серія «Філологія»*. Острог : Вид-во НаУОА, 2025. Вип. 25(93). С. 99–103. DOI: 10.25264/2519-2558-2025-25(93)-99-103

2. PLM Reference Data Library / POSC Caesar Association. URL: https://rds.posccaesar.org/ontology/plm/ (дата звернення: 18.07.2026).

3. CFIHOS Reference Data Library. Version 2.0 / IOGP JIP36. 2025. URL: https://www.jip36-cfihos.org/cfihos-standards/ (дата звернення: 15.07.2026).

4. SLB Energy Glossary. URL: https://glossary.slb.com/ (дата звернення: 18.07.2026).

5. ISO 704:2022. Terminology work – Principles and methods. Geneva : International Organization for Standardization, 2022.

6. ISO 1087:2019. Terminology work and terminology science – Vocabulary. Geneva : International Organization for Standardization, 2019.

7. Batres R., West M., Leal D., Price D., Masaki K., Shimada Y., Fuchino T., Naka Y. An upper ontology based on ISO 15926. *Computers & Chemical Engineering*. 2007. Vol. 31, No. 5–6. P. 519–534. DOI: 10.1016/j.compchemeng.2006.07.004

8. Cimiano P., Montiel-Ponsoda E., Buitelaar P., Espinoza M., Gómez-Pérez A. A note on ontology localization. *Applied Ontology*. 2010. Vol. 5, No. 2. P. 127–137. DOI: 10.3233/AO-2010-0075

9. McCrae J. P., Arcan M., Asooja K., Gracia J., Buitelaar P., Cimiano P. Domain adaptation for ontology localization. *Journal of Web Semantics*. 2016. Vol. 36. P. 23–31. DOI: 10.1016/j.websem.2015.12.001

10. ДСТУ 3809-98. Компресори. Терміни та визначення. [Чинний від 2000-01-01]. Київ : Держстандарт України, 1999. 17 с.

11. ДСТУ 3063-95. Насоси. Класифікація. Терміни та визначення. [Чинний від 1996-07-01]. Київ : Держстандарт України, 1995. 76 с.

12. ДСТУ 2611-94. Арматура трубопровідна загальнопромислового призначення. Терміни та визначення. [Чинний від 1996-07-01]. Київ : Держстандарт України, 1994. 34 с.

Дата першого надходження статті до видання: 23.07.2026
Дата прийняття статті до друку після рецензування: 17.08.2026
Дата публікації (оприлюднення) статті: 06.11.2026