

D5.2 Skills WatchTower

Final Methodology and Implementation Summary

TOUR-X — CoVEs for the Tourism Industry | Project 101056184 | Hellenic Open University (HOU)

1. Purpose and methodological logic

The Skills WatchTower is the demand-side skills-intelligence mechanism developed under TOUR-X Task 5.2. Its purpose is to combine employer-facing primary evidence with contextual secondary evidence so that VET providers, tourism organisations, Knowledge Triangles and public authorities can monitor current and emerging tourism skills needs. The methodology was designed to complement the broader T3.2 Training Needs Analysis and the D3.3 Graduate Students' Tracking System rather than duplicate them. T3.2 provides broad sector and training-needs evidence; the WatchTower translates this into a repeatable company-level monitoring instrument; and the GSTS contributes supply-side graduate/outcome intelligence [1][2][3].

2. Initial evidence collection and initial results

Between September 2024 and January 2025, HOU consolidated partner evidence and reviewed European policy frameworks, Cedefop analyses, national and regional studies, academic literature, WP3 skills-gap evidence, and relevant tourism and labour-market intelligence [2]. The review functioned as a structured gap-analysis stage: existing evidence was checked against the information needed for a regional tourism-SME monitoring mechanism, including current skills shortages, workforce competency levels, emerging needs, regional variation and measurable indicators [3].

The main result of this initial phase was the identification of five recurring thematic domains: (1) digital skills and technology adoption; (2) green and sustainability competences; (3) customer-service excellence and intercultural communication; (4) leadership, management and entrepreneurial skills; and (5) readiness for emerging technologies, including AI, Smart Tourism and automation [2]. These domains became the common thematic structure of the survey, indicators and reporting outputs.

3. Survey design

Between February and March 2025, HOU developed a dedicated skills-needs survey for tourism SMEs. Target respondents included business owners, managers, HR representatives, supervisors and other professionals with direct operational knowledge of workforce needs [2]. The instrument combined Likert-scale items, checklists, structured questions and open-ended contextual questions. It covered business profile, current skills gaps, workforce competencies, training needs, barriers to upskilling, expected future skills, digital transformation, sustainability, customer service/intercultural communication and emerging technologies [2][3].

4. Validation and refinement — actual implementation

The original Description of Action foresaw one focus group per country. During implementation, the validation approach was adapted to a combined model comprising: structured consortium peer review; a consolidated multi-stakeholder session involving TOUR-X, Pact for Skills and PANTOUR participants; targeted consultation in Attica; targeted consultation in Veneto; and additional partner feedback during the Potsdam Transnational Project Meeting [2]. This produced cross-country, regional, VET-provider, employer and European sectoral input. Feedback led to revisions in terminology, question logic, thematic priorities, response options, SME relevance and technical usability. This final methodology records the actual implemented validation model rather than repeating the original plan in future tense.

5. Technical implementation

Following validation of the English-language instrument, HOU developed the digital WatchTower environment. The first functional prototype was recorded on 9 June 2025 and was subsequently subjected to internal testing and partner feedback [2]. The final environment included the survey, visualisation, filtering and reporting functions. The Final Technical Report records chart-based reporting views, visual analytics, regional and thematic comparison, data reporting, and functions supporting interpretation of tourism skills needs [2]; radar/spider-type visualisations can be produced by authorised users from the exported data (CSV/Excel) for further analysis.

6. Data sources and integration

The WatchTower uses a combined primary/secondary evidence model. Primary evidence is generated through the tourism-SME survey. The Final Technical Report also records partner and stakeholder evidence, national and regional labour-market information, publicly available datasets, EU-level evidence and relevant secondary research as data/evidence streams used to enrich the mechanism [2]. The HOU methodology specifies data-import, cleaning, validation, transformation, alignment and quality-control procedures [3].

For public reporting, each output should retain clear provenance. A chart derived from live survey responses should identify the relevant dataset and coverage. A platform screenshot based on sample/test entries should be labelled as a technical demonstration. Secondary evidence should identify the source, geography, reference period and role in interpretation where possible.

7. Reporting, analytics and visualisation

The analytical workflow combines survey submission, secure storage, administrator review, question-level visualisation, filtering, comparison and export. The project documentation records visual analytics, regional/thematic comparison and reporting functions [2]; radar/spider-type visualisations referenced in that documentation can be produced by authorised users from the exported data (CSV/Excel). The HOU revision materials additionally evidence a public survey, data-import interface, results log, chart-based reporting view and CSV/Excel export. These functions allow authorised users to examine skills patterns and to export underlying data for further analysis. Statistical interpretation should always be proportionate to the achieved N and geographic/subsector coverage.

8. From skills intelligence to action

The methodological objective is not only to collect data but to close the feedback loop into VET and workforce decisions. WatchTower findings can be used to: identify priority competence gaps; compare current and expected future demand; inform learning-objective and curriculum review; support regional training priorities; and contribute evidence to policy dialogue. This reflects the logic of MS16, which links questionnaires/interview guides, reporting tools and the translation of skills-mismatch findings into learning objectives [1].

9. Continuous monitoring and update cycle

The mechanism is designed for repeated use. A regional cycle consists of: (1) confirm scope and target population; (2) deploy the common survey or a documented local adaptation; (3) recruit tourism SMEs; (4) collect and validate responses; (5) integrate relevant contextual secondary evidence; (6) generate descriptive and comparative outputs; (7) interpret findings with regional stakeholders; and (8) feed the findings into training, curriculum and policy decisions. Future cycles should record achieved N, geography, subsector coverage, dates and methodological caveats so results remain traceable and comparable [1][3].

10. Data protection and quality assurance

Data handling should follow the GDPR principles of lawfulness, fairness and transparency, purpose limitation, data minimisation, accuracy, storage limitation, integrity/confidentiality and accountability [8]. The methodology therefore separates public survey access from controlled analytical/administrative access, applies validation and cleaning procedures, and requires traceable source information for imported data. Quality assurance includes review of survey logic, data completeness, duplicate/inconsistent records, coding consistency, and clear labelling of test/demo records.

11. Transferability and sustainability

Transferability is supported by the common thematic coding, the survey instrument, documented data-management procedures and the Long-Term Action Plan. A regional Knowledge Triangle, VET provider or third-party CoVE can reuse the mechanism by appointing a coordinator, adapting only context-specific elements while preserving core indicators, conducting a local response cycle, documenting secondary evidence and using the same reporting logic. HOU retains a technical/methodological stewardship role, while regional actors can coordinate local cycles according to their needs and resources [2][3].

12. Methodology-to-evidence traceability

Methodological element	Implemented evidence	Verification source
Initial evidence review	Sep 2024–Jan 2025 review and five thematic domains	Final Technical Report; HOU Methodology
Survey design	Dedicated tourism-SME questionnaire, Feb–Mar 2025	Final Technical Report; live survey
Validation	Consortium peer review + TOUR-X/Pact for Skills/PANTOUR + Attica/Veneto + Potsdam feedback	Final Technical Report / Focus Group evidence
Technical platform	Prototype 9 June 2025; final survey/visualisation/filter/reporting environment	Final Technical Report; platform screenshots
Data integration	Primary survey + stakeholder/partner + labour-market + public/EU/secondary sources	Final Technical Report; HOU Methodology
Reporting	Charts, filters, comparisons, export; spider/radar output documented in project records	Final Technical Report; platform evidence
Transferability	Repeatable cycle + Long-Term Action Plan	HOU Methodology; Long-Term Action Plan

References and source framework

[1] TOUR-X Application Form, Technical Description (Part B), Task 5.2 and Milestone MS16.

[2] TOUR-X Final Technical Report, WP5 / Task 5.2 — Skills WatchTower.

[3] HOU, Final Methodology for Implementation of WP5 — Task 5.2, 14 February 2025.

[4] European Commission, Transition Pathway for Tourism (2022): https://single-market-economy.ec.europa.eu/news/transition-pathway-tourism-published-today-2022-02-04_en

[5] European Commission, Pact for Skills — Tourism ecosystem and Tourism Skills Partnership: https://pact-for-skills.ec.europa.eu/about/industrial-ecosystems-and-partnerships/tourism-ecosystem-and-lsps_en

- [6] PANTOUR, Skills Profile Report Europe and Sectoral Skills Intelligence Monitoring System: <https://pact-for-skills.ec.europa.eu/>
- [7] Cedefop, skills intelligence / skills anticipation resources: <https://www.cedefop.europa.eu/>
- [8] Regulation (EU) 2016/679 (GDPR): <https://eur-lex.europa.eu/eli/reg/2016/679/oj>
- [9] TOUR-X live Skills WatchTower survey: <https://watchtower.tour-x.eu/tourism-workforce-skills-needs/>