



PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

PROPOSER:

KATS

DATE OF CIRCULATION:

2023-08-09

CLOSING DATE FOR VOTING:

2023-11-01

A proposal for a new field of technical activity shall be submitted to the Office of the CEO, which will process the proposal in accordance with [ISO/IEC Directives, Part 1, Clause 1.5](#).

Furthermore, a proposal will be considered as complete if every information field is complete and follows the guidelines for proposing and justifying a new field of activity given in the [ISO/IEC Directives, Part 1, Annex C](#).

TITLE

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.2](#))

Urban Logistics

SCOPE

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.3](#))

Standardization in the field of urban logistics technology and services, including but not limited to terms, functions, assessments and evaluations, and requirements for economical, efficient and eco-friendly urban logistics.

The goal of the technical committee is to help build urban logistics technologies and services that are sustainable, socially and economically responsible.

Standardization activities are technologies and services for efficient and sustainable urban logistics required for cities that are constantly evolving and expanding due to rapid population growth and digital transformation.

Excluded: Standardization covered by

- ISO/TC 22 - Road vehicles
- ISO/TC 34 - Food products
- ISO/TC 92 - Fire safety
- ISO/TC 101 - Continuous mechanical handling equipment
- ISO/TC 122 - Packaging
- ISO/TC 176 - Quality management and quality assurance
- ISO/TC 204 - Intelligent transport systems
- ISO/TC 262 - Risk management
- ISO/TC 268 - Sustainable cities and communities
- ISO/TC 283 - Occupational health and safety management

ISO/IEC JTC 1 - Information technology
ISO/TC 308 - Chain of custody
ISO/TC 315 - Cold chain logistics
ISO/TC 321 - Transaction assurance in E-commerce

and newly established TC on Innovative Logistics.

PURPOSE AND JUSTIFICATION (Please use the field immediately below or attach an annex.)

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.13](#))

Logistics is consisted of technologies and services to deliver goods between the point of origin and the point of consumption while meeting the requirements of customers and/or corporations. The logistics activities usually involve the integration of information flow, materials handling, production, packaging, inventory, transportation, warehousing, and often security.

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According to ResearchAndMarket.com, the global logistics market is expected to grow by 95.42 billion US dollars by 2024, factored with increasing cross-border trade, rise in the use of multimodal transport, fresh food delivery, and growing e-commerce market.

The logistics industry is involved in a huge number of market players with numerous operations and interfaces throughout the supply chain. With increasing globalization and the expansion of the global market, however, there are more challenges to be considered ever before. The logistics industry must run more secure, safe, healthy, and environmentally friendly operations while continuously improving its overall performance. This is clearly a big challenge especially for SMEs and many developing countries.

Take Walmart, for example, which deals with over 100,000 suppliers — a massive network of manufacturers, distributors, and subcontractors, from different countries with varying laws and regulations.

Driven by digitization and socio-economic trends further fuelled by the COVID-19 pandemic, e-commerce is now experiencing dramatic growth. The EU's e-commerce market is expected to grow at a annual growth rate (CAGR) of 6.3% between 2019-23 (Statista).

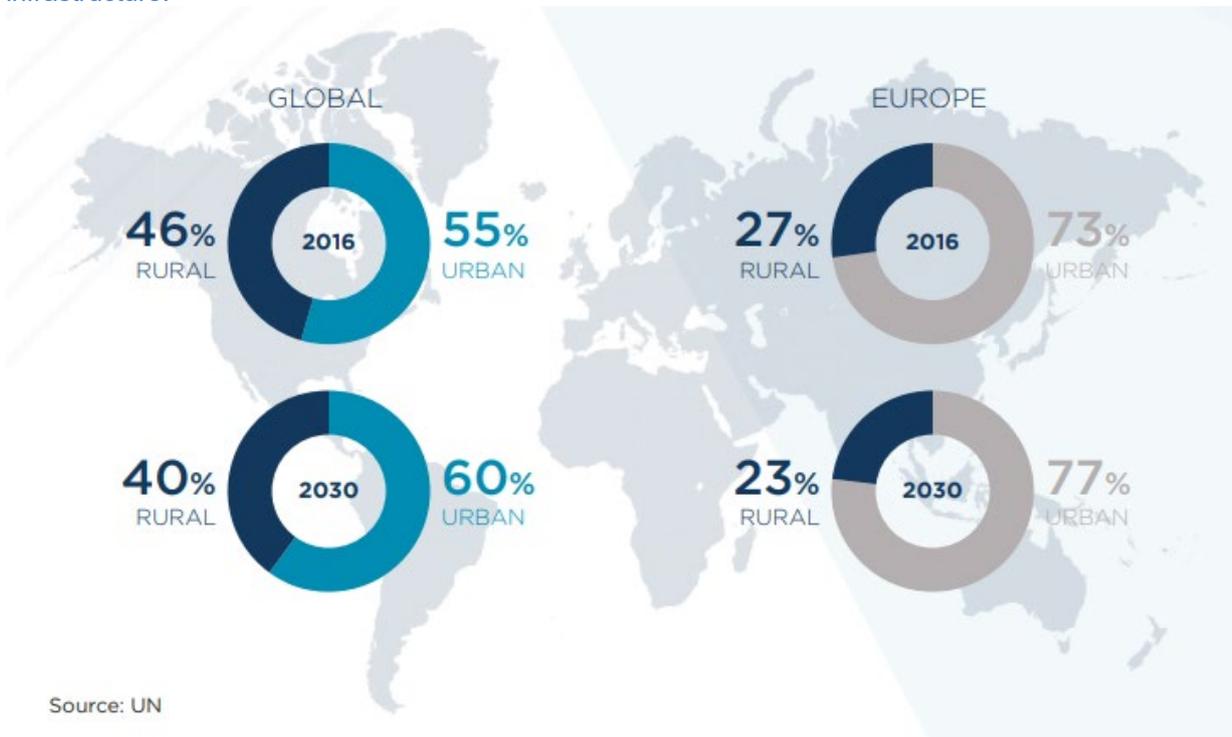
The rapid increase in cargo volume in cities and metropolitan areas causes traffic congestion, air pollution, noise, and logistics costs, ultimately increases costs and various types of risks. An efficient urban logistics system is required to maintain and enhance the city's competitiveness, which is an important factor in the city's economy and improves employment and living conditions.

Demographic trends indicate an increasing concentration of urban logistics activities such as last mile delivery in urban areas. According to the latest UN statistics, 55% of the world's population currently lives in urban areas, and this figure is expected to reach 60% by 2030. In Europe, 77% of the population is expected to live in cities by 2030. (See Figure 1)

This trend creates many new economic concepts in urban societies. Some notable trends are:

- A rise of the on-demand economy. The on-demand economy refers to an economic activity that is technology-based and provides consumers access to a product or service immediately upon request. The growth of the on-demand economy is disrupting many sectors, from food delivery to other sectors such as groceries, music and video, learning and education, healthcare and, of course, logistics.
- The sharing economy on the one hand enables better distribution and use of idle resources, reducing carbon footprint and resource use, while increasing access to previously unaffordable goods and services and creating shared goods or infrastructure.
- The crowdsourcing economy refers to the involvement of individuals or organizations that provide services or provide products by offering tangible goods, services, ideas and/or technologies.

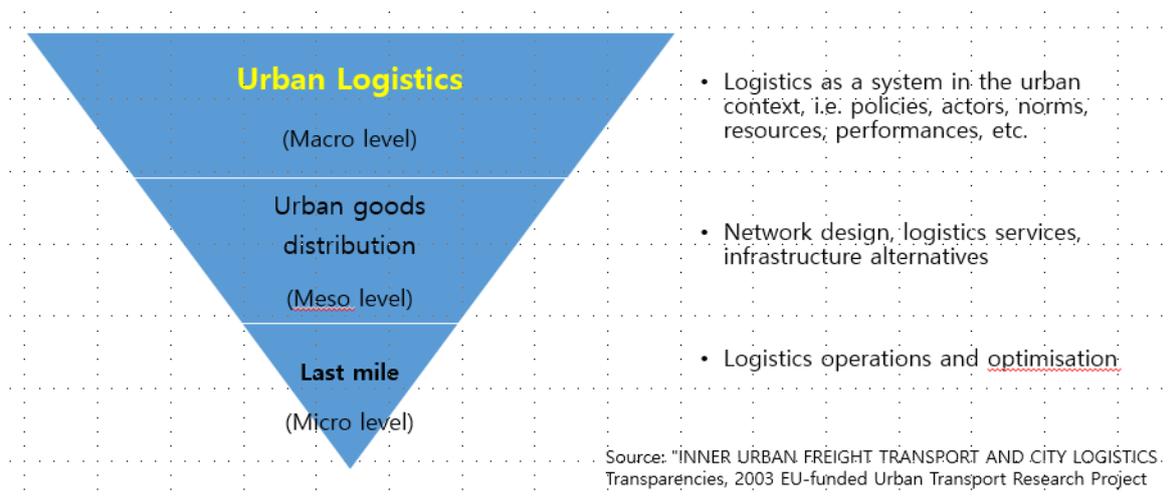
These economic concepts are closely related to urban logistics. Logistics in a city is often customer-centric rather than business-centric in direct contact with customers. Online purchases and last-mile delivery are increasingly concentrated in cities. Processes, infrastructure and services related to urban logistics must be optimized, taking into account the ever-increasing population of cities and the complexity of their infrastructure.



<Fig 1> Population projections in urban areas of the world

Source: Report from Urban Logistics, Cushman & Wakefield. <https://www.cushmanwakefield.com/-/media/cw/emea/united-kingdom/insights/download-pdfs/2017-cushman-wakefield-urban-logistics-report.pdf>

The vertical hierarchies of urban logistics are as follows:



<Fig 2> The concept of vertical hierarchies of urban logistics

Especially after the COVID-19 pandemic and digital transformation, the development of urban logistics faced the following challenges.

- (Rapidly increasing urbanization rates worldwide) Growing demand for urban logistics due to increase in urban population and e-commerce.
- (Urban environmental pollution problems due to inefficient logistics) Increased need to create a sustainable urban logistics ecosystem by improving logistics efficiency and solving environmental problems
- (Chronic high-cost, low-efficiency logistics) Urban logistics (including last mile) accounts for about 50% of total distribution costs.
- (Responding to digitization and technological progress) Change from 'labor-intensive industry' to 'technology-intensive industry' through the digitalization of logistics activities using 4th industrial technologies such as big data, IoT, artificial intelligence, and block chain.
- (Harmony between cities and global supply chains) The issue of increasing logistics efficiency between cities is highlighted by expanding the scope of cross-border purchasing and trade.
- (Improvement of living convenience) Improving the convenience of people's lives and improving working conditions through continuous improvement of urban logistics services and transportation efficiency

Although there are some TCs and standards in ISO covering packaging and logistics means, there are no harmonized international standards for urban logistics technologies and services. In this area, the need for standardization was discovered belatedly as various logistics technologies and services developed worldwide due to the rapidly changing value chain of urban logistics and changes in market demand.

It's time to start standardizing for urban growth, shifting consumer awareness, and harmonious and efficient linking of global and urban supply chains. The new TC will contribute to increasing the overall value of the city by promoting innovation in urban logistics technology and services, protecting logistics workers and consumers, increasing the efficiency of urban logistics, and helping to solve urban environmental problems.

The proposed TC will focus on urban logistics technologies and service standards so as not to overlap with the scope of existing TCs. Additionally, the new committee will work closely with existing TCs as well as various national and industry stakeholders to develop new standards where appropriate.

The expected effects of the proposed new technical committee are

- Helping improve social, economic, and sustainable urban logistics
- Improving the stable and sustainable quality of logistics processes and services
- Helping continue sustainable growth of urban logistics market
- Reducing the risk of workplace accidents
- Helping respond to changed value chain of logistics due to continuous digital transformation
- Reducing overall logistics costs and burdens globally

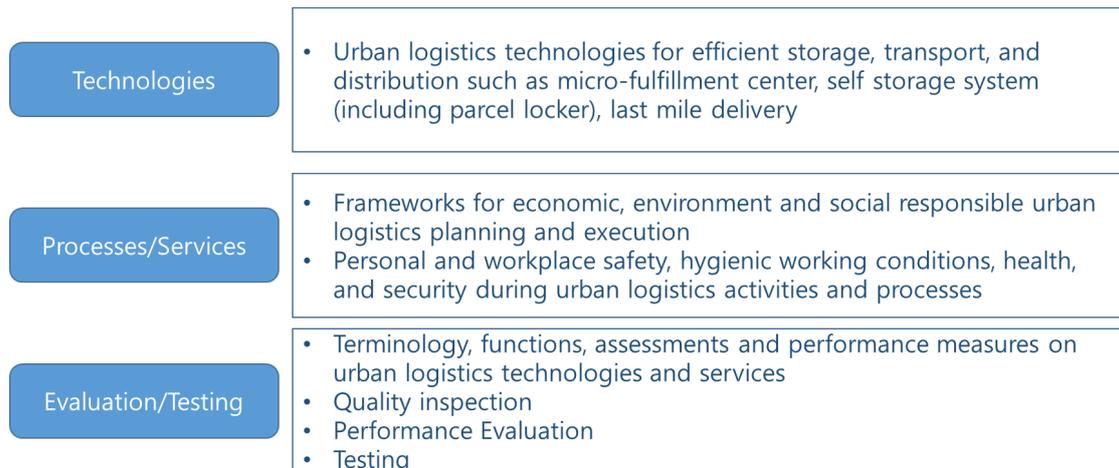
PROPOSED INITIAL PROGRAMME OF WORK (Please use the field immediately below or attach an annex)

Please see the [ISO/IEC Directives, Part 1, Annex C.4.4 and C-4.5](#))

For each item, the initial work programme shall define the deliverable type and target dates. The initial work programme shall also assign priorities to the different items.

The proposed TC will focus on urban logistics technologies and service standards so as not to overlap with the scope of existing TCs. Additionally, the new committee will work closely with existing TCs as well as various national and industry stakeholders to develop new standards where appropriate.

Initial programs of work are as follows.



The standards to be developed will be extended, not limited to:

A few examples include smart retail and storage facilities, non-contact delivery service, back-end logistics, urban micro-fulfillment, safety of urban logistics workers, and more.

- Evaluation of logistics technology and services according to changes in the urban development value chain
- Terms, performance criteria and testing methods for urban logistics technologies and items such as micro-fulfillment center, self-storage, unmanned store, etc.
- Quality measurement of urban logistics operations and services

Some potential items are

- General requirements, structures and quality inspection methods for unmanned parcel locker
- Terminology, functions and general requirements of urban logistics technologies and services
- Assessments and performance - Measurement of quality of service for urban logistics

RELATION OF THE PROPOSAL TO EXISTING INTERNATIONAL STANDARDS AND ON-GOING STANDARDIZATION WORK

- The proposer has checked whether the proposed scope of the new committee overlaps with the scope of any existing ISO or IEC committee or JTC1 sub-committee
- If an overlap or the potential for overlap is identified, the affected committee has been informed and an agreement has been reached between proposer and committee on
 - i. modification/restriction of the scope of the proposal to avoid overlapping,
 - ii. potential modification/restriction of the scope of the existing committee to avoid overlapping.
- If agreement with the existing committee has not been reached, please explain why the proposal should be approved.
- Have proposals on this subject been submitted into an existing committee and rejected? If so, what were the reasons for rejection?

No

LISTING OF RELEVANT DOCUMENTS (SUCH AS STANDARDS AND REGULATIONS) AT INTERNATIONAL, REGIONAL AND NATIONAL LEVEL

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.6](#))

- ISO/TC 268 - Sustainable cities and communities
- (ISO/TC 268/SC 2 - Sustainable cities and communities - Sustainable mobility and transportation)
- ISO/TC 315 - Cold chain logistics
- ISO/TC 154 - Processes, data elements and documents in commerce, industry and administration
- ISO/TC 204 (WG 7 General fleet management and commercial/freight)
- ISO 26000: Guidance on social responsibility
- ISO 28000:2007: Specification for security management systems for the supply chain
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- Standards in CEN/TC320 - Transport - Logistics and services
- Standards in CEN/TC331 - Postal services
- Standards in CEN/TC273 - Logistics (currently, inactive)
- Standards in CEN/TC119 - Swap bodies for combined goods transport
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- GS1 standards (e.g. Product Classification (GPC), GS1 Global Data Model, GS1 Digital Link)
- Korean standards on logistics, packaging, transport and information flow
- Enterprise Certification, Association for Supply Chain Management (ASCM)

* CEN (TC320 & TC331): Standards that have already been developed in relation to urban logistics may be established into ISO standards and a standard cooperation system between relevant TCs in CEN and ISO should be established.

Europe’s Horizon 2020 (ALICE) project on urban logistics such as Zero Emissions Urban Freight in main European Cities, Physical Internet pilot implementations well-functioning and extended in industry practice, etc. also provides useful and insightful documents

The scopes and differences of the most relevant TCs in ISO are compared below.

| ISO TCs | SCs / WGs | Title | Scope | Gap |
|------------|--|---|--|--|
| ISO/TC 268 | ISO/TC 268/SC 2 - Sustainable cities and communities - Sustainable mobility and transportation | Sustainable cities and communities | Focusing on development of requirements, frameworks, guidance and supporting techniques and tools related to the achievement of sustainable development to help all Cities and Communities and their interested parties in both rural and urban areas become more sustainable. | Mainly focusing on the field of sustainable mobility and transportation for passenger movements. The sustainable development approach based on ISO 37101 remains similar |
| ISO/TC 315 | | Cold chain logistics | Standardization in the field of cold chain logistics | New TC will excluded the field of cold chain logistics |
| ISO/TC 154 | | Processes, data elements and documents in commerce, industry and administration | Business, and administration processes and supporting data used for information interchange between and within individual organizations and support for standardization activities in the field of industrial data. | New TC will exclude the activities in TC154. New TC will mainly focusing on physical specifications, technologies and services within/between urban area. |
| ISO/TC 204 | WG 7 - General fleet management and Commercial/freight | Intelligent Transport System | Overall system aspects and infrastructure aspects of intelligent transport systems (ITS) | New TC will exclude the activities in TC204. New TC will cooperate with WG7 for information frameworks and electronic information exchange guidelines developments |

LISTING OF RELEVANT COUNTRIES WHERE THE SUBJECT OF THE PROPOSAL IS IMPORTANT TO THEIR NATIONAL COMMERCIAL INTERESTS

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.8](#))

Urban logistics is concerned with all the different activities involving cargo flows, workers, and consumers from the beginning to the end of ever-expanding regional and global supply chains. The proposed new activities are relevant for all countries.

LISTING OF RELEVANT EXTERNAL INTERNATIONAL ORGANIZATIONS OR INTERNAL PARTIES (OTHER THAN ISO AND/OR IEC COMMITTEES) TO BE ENGAGED AS LIASONS IN THIS WORK

(Please see the [ISO/IEC Directives, Part 1, Clause C.4.9](#))

- Standards in CEN/TC320 - Transport - Logistics and services
- Standards in CEN/TC331 - Postal services
- Alice (Alliance for logistics innovation through collaboration in Europe)

IDENTIFICATION AND DESCRIPTION OF RELEVANT AFFECTED STAKEHOLDER CATEGORIES

(Please see [ISO Connect](#))

| | Benefits/Impacts/Examples |
|---|---|
| Industry and commerce – large industry | E-commerce, logistics, distribution and retail businesses |
| Industry and commerce – SMEs | E-commerce, logistics, distribution and retail businesses |
| Government | All governments, city authorities |
| Consumers | All consumers |
| Labour | E-commerce, logistics, distribution and retail industries |
| Academic and research bodies | Logistics, retailing, Urban planning, SCM, etc |
| Standards application businesses | Standards related to city logistics, retailing, urban planning, etc |
| Non-governmental organizations | Global city logistics, intechopen, and many sustainable urban logistics related organizations |
| Other (please specify) | Relevant stakeholders such as urban freight distribution operators, planners and governors, etc |

EXPRESSION OF LEADERSHIP COMMITMENT FROM THE PROPOSER

(Please see the [ISO/IEC Directives, Part 1, Annex C, Clause C.4.12](#))

If accepted, KATS (Korea) is willing to undertake the work of secretariat and fully support the new committee including chairmanship and secretariat.

Since the scope of the proposed TC is relatively wide, several sub-committees and working groups are needed and it is suggested to divide the roles according to the interests of each country and standard body

- The proposer confirms that this proposal has been drafted in compliance with iso/iec directives, part 1, annex c**

SIGNATURE OF THE PROPOSER

KATS

COMMENTS OF THE ISO CENTRAL OFFICE (IF ANY)