**FORM 1:**
**PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY**

<table>
<thead>
<tr>
<th>Circulation date</th>
<th>Reference number: 305</th>
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<tr>
<td>2022-04-27</td>
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<tr>
<th>Closing date for voting</th>
<th>Proposer</th>
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ISO/TS/P 305

A proposal for a new field of technical activity shall be submitted to the ISO Central Secretariat, which will assign it a reference number and process the proposal in accordance with the ISO/IEC Directives Part 1, Clause 1.5. The proposer may be a member body of ISO, a technical committee, subcommittee or project committee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the ISO/IEC Directives Part 1, Annex C.

**Proposal** (to be completed by the proposer)

**Title of the proposed new committee** (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover).

**Online catering service**

**Scope statement of the proposed new committee** (The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned).

Standardization in the field of online catering service.
The scope will include, but is not limited to:
- Vocabulary, principles, and framework of online catering service,
- Guidelines for service of online catering service providers, including physical restaurants, virtual kitchens/virtual restaurants
- Contents and methods of meal display and information description on online catering service website/App, and accessible online ordering,
- Operation management of online catering service providers, including purchasing and inventory, marketing,
- Monitoring, evaluation, and improvement of service.

Excluded: Standardization covered by ISO/TC 34/SC 17(food safety management), ISO/TC 122(Packaging), ISO/TC 228/WG 16(Tourism and related services - Restaurants), ISO/TC 268/SC 2(Sustainable cities and communities - Sustainable mobility and transportation), ISO/TC 290(Online reputation) and ISO/TC 315(Cold chain logistics), and ISO/TC 326(Machinery intended for use with foodstuffs)

**Note:** see Annex A - Ecosystem of Online Catering Service Industry
☑ The proposer has checked whether the proposed scope of the new committee overlaps with the scope of any existing ISO committee

☐ If an overlap or the potential for overlap is identified, the affected committee has been informed and consultation has taken place between proposer and committee on
  i. modification/restriction of the scope of the proposal to eliminate the overlap,
  ii. potential modification/restriction of the scope of the existing committee to eliminate the overlap.

☐ If agreement with the existing committee has not been reached, arguments are presented in this proposal (under question 7) as to why it should be approved.

Proposed initial programme of work. (The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subject proposed. Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.). Supplementary justification may be combined with particular items in the programme of work. The proposed programme of work shall also suggest priorities and target dates.)

The proposed TC prioritizes the following items to be standardized:
1. Online catering service—Virtual kitchen—Guidelines for service (note: upgrade from ISO/IWA 40 “Guidelines for virtual kitchen services”)
2. Online catering service—Vocabulary
3. Online catering service—Principles and framework
4. Online catering service—Virtual kitchen—Purchasing and inventory management
5. Online catering service—Virtual restaurants—Service provision

If the proposal is approved, the new TC will start working from Item 1 (ISO/IWA 40 “Guidelines for virtual kitchen services” has been developed for this topic), Item 2, and item 3, which meet market needs for standards in the online catering service industry.

Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal (This may be combined with the "Proposed initial programme of work" if more convenient).

This TC develops all types of ISO deliverables such as IS, TS, PAS, and TR.
A listing of relevant existing documents at the international, regional and national levels. (Any known relevant document (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.)

**ISO standards**
- ISO/IWA 40 Guidelines for online kitchen services
- ISO/IWA 36 Guidelines for contactless delivery service
- ISO 21621:2021 Tourism and related services—Traditional restaurants—Visual aspects, decoration and services
- ISO 22000:2018 Food safety management systems — Requirements for any organization in the food chain
- ISO/TS 22002-2:2013 Prerequisite programs on food safety—Part 2: Catering
- ISO 22041:2019 Refrigerated storage cabinets and counters for professional use—Performance and energy consumption
- ISO/IEC GUIDE 76:2020 - Development of service standards — Recommendations for addressing consumer issues
- ISO/WD 5665 - Consumer incident investigation — Requirements and guidance
- ISO/DIS 31700 - Consumer protection — Privacy by design for consumer goods and services
- ISO 20488:2018 - Online consumer reviews — Principles and requirements for their collection, moderation and publication

**European standards**
- EN 16282-1:2017 Equipment For Commercial Kitchens – Components For Ventilation In Commercial Kitchens—Part 1: General Requirements Including Calculation Method
- EN 16282-5:2017 Equipment For Commercial Kitchens–Components For Ventilation In Commercial Kitchens—Part 5: Air Duct–Design And Dimensioning
- EN 16282-8:2017 Equipment For Commercial Kitchens–Components For Ventilation In Commercial Kitchens—Part 8: Installations For Treatment Of Aerosol; Requirements And Testing

**China’s standards (National Standard and Association Standard)**
- GB/T 33497-2017 Standard of quality management for restaurant
- GB/T 39451-2020 Specification for contactless delivery service of commodities
- GB/T 40041-2021 Specifications for information description of food delivery
- GB/T 40042-2021 Green catering operation and management
- GB/T 40133-2021 Technical requirements for recycling and further processing of waste cooking oil from restaurant
- T/CCPITCSC 067—2021 Requirements for occupational competence of the take-out operator
A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. (The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

Online catering service (OCS) is a new catering service that orders food online and delivers it to a designated place without direct contact between OCS providers and customers. OCS providers include physical restaurants, virtual kitchens/virtual restaurants. The service process of OCS consists of 6 steps (or areas), including Order online, Order processing, Prepare meals, Pack meals, Deliver meals, and Customer Feedback (Note: see Annex A - Ecosystem of Online Catering Service Industry). The proposed TC will focus on the standardization of Order online, Order processing and Preparing meals. The proposed TC is the extension of ISO/IWA 40, which extends the standardization scope to the above four focus areas of online catering service, guiding the booming OCS. At present, ISO has no TC for OCS. There is a lack of corresponding standards in the physical restaurants providing meal takeaway services, the rapidly developing virtual kitchens/virtual restaurants, and other fields. The proposed TC is dedicated to filling the gaps in the standards in the field of OCS and developing highly feasible and widely applied ISO deliverables.

Among the six areas of OCS, the Packing meals are closely related to ISO/TC 122(Packaging), which includes paper bags and paper sacks, accessible design for packaging, temperature-controlled product packaging, etc.; The Deliver meals relates to ISO/TC 268/SC 2(Sustainable cities and communities - Sustainable mobility and transportation), which provides standards for smart mobility and transportation for delivery items services in and between cities, and ISO/TC 315(Cold chain logistics), developing standards in the field of cold chain logistics. In addition, ISO/TC 321(Transaction assurance in E-commerce) and ISO/TC 290(Online reputation) provides standards for ODR and online reputation separately. As mentioned, the scope of the proposed TC will not include these three areas (Pack meals, Deliver meals & Customer Feedback), so it will not touch on the TC/SC mentioned above.

Preparing meals is an important area in the standardization of this proposed TC, which will solve various problems in the daily operation of OCS providers. However, it doesn't overlap ISO/TC 34/SC 17(food safety management), which rules the safety management of food in any industry, and ISO/TC 228/WG 16(Tourism and related services - Restaurants), which is mainly about physical restaurants in the tourism industry. Standards developed by the new TC will avoid the scope of the above SC and WG. If the corresponding standards overlap with the above two fields, a joint WG will be created to solve the problem if necessary.

Order online, order processing, and customer feedback areas are also essential components in OCS. At present, they do not overlap with the standardization scope of any other TC.
A listing of relevant countries where the subject of the proposal is important to their national commercial interests.

The proposed TC is relevant to almost all countries, especially to those:
- With the rapid development of OCS, especially those in Europe, America, Oceania, East Asia, and Southeast Asia. Many physical restaurants rely on the Internet to provide OCS, and many virtual kitchens/virtual restaurants have been founded. With rapid economic development, customers increasingly rely on online catering services to save time or seek convenience. To date, the new business type of virtual kitchens/virtual restaurants has been developed in more than 80 countries.
- Willing to support virtual kitchens/virtual restaurants entrepreneurship. Because of the low initial investment cost of virtual kitchens/virtual restaurants, many entrepreneurs in the catering field will set up an online restaurant in virtual kitchens/virtual restaurants as the first step to starting a business. This new business type is to obtain low trial and error costs. Developing OCS standards is conducive to improving the success rate of catering service entrepreneurship and reducing social costs to activate social and economic activity.
- Seeking agricultural supply chain development. Farmers’ income will be improved, and in developing and undeveloped countries or regions, poverty will be lifted. OCS expands the catering service market to facilitate terminal consumption. And the demand will transmit to the need for agricultural products alongside the industrial chain, thus promoting the development of agricultural products.

ISO/IWA 40 participating countries include China, Germany, Japan, Peru, Philippines, Singapore, and the United States. The above countries and all countries interested in the standardization of OCS are welcome to join the proposed TC.

A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s). (In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap. The result of any communication with other interested bodies shall also be included.)

ISO/TC 34/SC 17(food safety management)
ISO/TC 122(Packaging)
ISO/TC 225(Market, opinion and social research)
ISO/TC 228/WG 16(Tourism and related services - Restaurants)
ISO/TC 251(Asset management)
ISO/TC 260(Human resource management)
ISO/TC 268/SC 2(Sustainable cities and communities - Sustainable mobility and transportation)
ISO/TC 283(Occupational health and safety management)
ISO/TC 290(Online reputation)
ISO/TC 312(Excellence in service)
ISO/TC 315(Cold chain logistics)
ISO/PC 317(Consumer protection: privacy by design for consumer goods and services)
ISO/TC 321(Transaction assurance in E-commerce)
ISO/TC 323(Circular economy)
ISO/TC 324(Sharing economy)
ISO/TC 326(Machinery intended for use with foodstuffs)
ISO/PC 329(Consumer incident investigation guideline)
FAO(Food and Agriculture Organization of the United Nations)
A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).

The potential stakeholders are:

- **Consumers**: The standards in this field can improve the service quality of catering service providers. Thus, consumers can enjoy safe, convenient, and reliable online catering services, which can also boost consumer confidence.

- **Catering providers**:
  - Standards in this field can address the operating efficiency of OCS providers, reduce operating costs, improve service quality and industry transparency, and enhance the core competitiveness of service providers. The standards of marketing management can consolidate the competitive advantage of service providers.  
  - Other types of catering service providers, such as physical restaurants can adopt the standards in this proposal TC. This will lead to the same benefits as other OCS providers and improve the process and management.

- **Regulators**: The standards in this field provide best practices about OCS, which can be used as a reference for regulators to manage and promote the healthy development of the industry.

- **Suppliers of agricultural products**: The standards in this field are helpful to expand the catering service market, increase the income of suppliers of agricultural products, reduce poverty and narrow the gap between the rich and the poor in society.

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

SAC(China) is willing to undertake the work of the new TC Secretariat if the proposed TC is accepted.
Purpose and justification for the proposal. (The purpose and justification for the creation of a new technical committee shall be made clear and the need for standardization in this field shall be justified. Clause C.4.13.3 of Annex C of the ISO/IEC Directives, Part 1 contains a menu of suggestions or ideas for possible documentation to support and purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and the need for their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more informed consideration of proposals and ultimately their possible success in the ISO IEC system.)

Catering is an important part of the service economy. In recent years, disruptive technologies, emerging service modes, and the need for a convenient lifestyle have made the OCS develop rapidly. Customers only need to order food online, and the food can be delivered to the designated place. Before the COVID-19 pandemic, this market had already begun taking shape. The restrictions imposed by the pandemic situation have accelerated the development of this industry. Under some restrictions, consumers are not allowed to go out for dining, and physical restaurants need to be closed temporarily. That caused a serious impact on the catering industry, as well as the supply chain because catering is an essential part of the supply chain. Countless businesses in the industry face the situation of bankruptcy or shutdown. Online catering service is a new way to provide service for consumers, which could reduce the fragility of the industry.

According to a survey by Business of Apps, a professional application business service website, the download of the global meal takeaway platform app in 2020 is 25% more than that in 2019, and it has increased by 21% as of November 2021. According to Global Online Food Delivery Services Market Report 2021, the global online meal ordering market will grow from 115.07 billion US dollars in 2020 to 126.91 billion US dollars in 2021. The report pointed out that by 2025, the market size will reach 192.16 billion US dollars, for a compound annual growth rate of 11%. The market is still expanding, and the proposed TC will promote the development of the industry from the following aspects:

1. Boost consumer confidence. The characteristics of not providing in-house meals and not having direct contact between the buyers and sellers (online catering service providers and customers), and the difficulty of controlling the quality of meals due to increased service process, have increased consumers' worries and concerns about OCS. The OCS industry wishes to address the problems with trust and assured consumption. The standardization of OCS can provide a reference for government supervision and industry self-discipline and help promote the transparency and standardized development of the industry, thus protecting consumers' rights and interests, and thereby boosting consumer confidence. The proposed TC also considers the needs of people with disabilities and establishes accessible online ordering standards.

2. Help the innovation of the physical restaurant business. The traditional business of physical restaurants is to provide in-house services for customers, and this market is in fierce competition. Physical restaurants can increase the types of services provided with OCS, gain business increment, and at the same time increase their income.

3. Improve service quality and management capability. Virtual kitchens/virtual restaurants are still in the growth stage of their life cycle, and the industry is developing extensively. There are differences in the management capacity of different kitchens, which leads to the differences in the quality of OCS provided, and customers can't enjoy consistent high-quality services, which affects the industry credit. The standards in the field of OCS will provide guidance from
management to service, multi-dimensionally promoting the kitchen to reduce costs and increase efficiency and enhance management ability. Providing better services for consumers while improving their own profitability.

4. Provide best practices for catering service entrepreneurship. Traditional catering services are expensive to start up. Entrepreneurs usually need to rent a large space to provide services to customers. This business model makes entrepreneurs bear a lot of risks and dampens the enthusiasm for catering service entrepreneurship. Virtual kitchens/virtual restaurants provide a new model for catering service entrepreneurship. Entrepreneurs only need to rent a small kitchen zone and provide delivery food to customers. This way of starting a business is lower in cost and less in risk, which can significantly boost entrepreneurial passion. The standardization of OCS will provide best practices for online restaurant entrepreneurship, build a guiding framework, provide management methods and improve the success rate of entrepreneurship as well.

5. Build an efficient OCS supply chain. The highly personalized catering service leads to inefficient cooperation between companies in the catering service supply chain, resulting in a large amount of waste of resources and pushing up the costs of catering services. The standardization of OCS will provide a model for the cooperation of companies in the online catering service supply chain, helping them cooperate smoothly. All aspects will benefit from the efficient connection, reduced resource loss, and green and sustainable development. These standards can also be applied to other types of catering service supply chains, and comprehensively improve the social benefits.

Set up a new TC, formulate standards for online catering services, and play the role of ISO standards in promoting the development of the service economy. The ISO deliverables of the new TC match SDGs of the following:
SDG Goal 1 – No poverty
SDG Goal 2 - Zero hunger
SDG Goal 8 - Decent work and economic growth
SDG Goal 11 – Sustainable cities and communities
SDG Goal 12 - Responsible consumption and production
SDG Goal 13 - Climate action
SDG Goal 17 – Partnerships for the goals

Signature of the proposer
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Further information to assist with understanding the requirements for the items above can be found in the Directives, Part 1, Annex C.

Annex A. Ecosystem of Online Catering Service(OCS) Industry
## Ecosystem of Online Catering Service (OCS) Industry

<table>
<thead>
<tr>
<th>Service process</th>
<th>Consumers</th>
<th>Order processing</th>
<th>Prepare meals</th>
<th>Pack meals</th>
<th>Deliver meals</th>
<th>Feedback</th>
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<tbody>
<tr>
<td></td>
<td>Restaurant website/app/phone</td>
<td>Physical restaurant</td>
<td>Virtual restaurant/virtual kitchen</td>
<td>Physical restaurant</td>
<td>Riders from restaurant (Restaurant to Consumer)</td>
<td>Consumers</td>
</tr>
<tr>
<td></td>
<td>Takeout platform</td>
<td>Virtual restaurant/virtual kitchen</td>
<td></td>
<td></td>
<td>Riders from takeout platform (Platform to Consumer)</td>
<td></td>
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### Service issues
- Meal information display
- User data collection

### Order processing
- Daily operation
- Purchasing and inventory
- Marketing
- Maintenance

### Related ISO TC
- Scope of proposed TC of OCS
- Scope of proposed TC of OCS

### Scope of proposed TC of OCS (Exclude)
- ISO/TC 34/SC 17 Management systems for food safety
- ISO/TC 228/WG 16 Restaurants
- ISO/TC 315 Cold chain logistics
- ISO/TC 268/SC 2 Sustainable cities and communities - Sustainable mobility and transportation
- ISO/TC 122 Packaging
- ISO/TC 290 Online reputation
- ISO/TC 321 Transaction assurance in E-commerce (Note: ODR)

[Diagram showing the flow of the ecosystem with arrows and labels for each step and process]