



# STRATEGIC BUSINESS PLAN

## ISO/TC 291

### Domestic gas cooking appliances

#### **EXECUTIVE SUMMARY**

##### **Scope**

International standardisation in the field of Domestic Gas Cooking Appliances including portable gas cooker with LPG cartridge intended to be used indoor with the focus on safety and energy efficiency, considering a whole appliance: safety, terminology, classification, constructional and performance characteristics, test methods and marking. Performance characteristics are related to energy efficiency and test procedures for cooking habits.

Excluded from this scope are cookstoves covered by the standards being developed in ISO/TC 285.

##### **Business Environment**

Specific aspects of the business environment are as follows:

- Manufacturers of domestic gas cooking appliances and the customers who use these appliances.
- Parties involved
  - o manufacturers of domestic gas cooking appliances
  - o manufacturers of control and safety devices for gas cooking appliances
  - o gas suppliers
  - o test laboratories

##### **Benefits**

- Confidence of consumers with respect to the safety and energy efficiency of domestic gas cooking appliances
- World-wide Standards provide commercial benefits to industry in the manufacture and approval of these appliances

## 1. INTRODUCTION

### 1.1 *ISO technical committees and business planning*

The extension of formal business planning to ISO Technical Committees (ISO/TCs) is an important measure which forms part of a major review of business. The aim is to align the ISO work program with expressed business environment needs and trends and to allow ISO/TCs to prioritize among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

### 1.2 *International standardization and the role of ISO*

The foremost aim of international standardization is to facilitate the exchange of goods and services through the elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: [ISO](#) (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical, which is the responsibility of [IEC](#) (International Electrotechnical Committee), and most of the Telecommunications Technologies, which are largely the responsibility of [ITU](#) (International Telecommunication Union).

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 164 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the [International Standard](#).

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its [Technical Committees](#) are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

ISO offers also the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.

## 2. BUSINESS ENVIRONMENT OF THE ISO/TC

### 2.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this ISO/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

A big part of the world population prepares their food with gas cooking appliances. There is a visual public market and direct interest to consumers themselves. The market for domestic gas cooking appliances requires more and more an international approach instead of national standardization processes and requires covering mechanical, electrical and electronic technology in one standardization framework.

The very high need of safety and quality of domestic gas cooking appliances is the result of negotiations between clients and manufacturers. The appliances can be tested according to existing national and regional standards. However the safety requirements in using gas for cooking processes in households are a legal aspect worldwide. Many countries take care of safety in using gas for cooking with local or regional safety legislations or regulations.

Examples for local or regional safety legislations or regulations are:

- Argentina: NAG 312:2010 Household burning gas cooking appliances.  
NAG 301:2006 Gas appliances, Classification, Gases for general uses and testing purposes, (NG-LG).
- Europe: EU regulation 2016/426/EU of 9<sup>th</sup> March 2016 on appliances burning gaseous fuels
- Japan: Japan Gas Business (Act NO.51 of March 31, 1954)  
Act on the Securing of Safety and the Optimization of Transaction of Liquefied Petroleum Gas (Act NO. 149 of 1967)

Examples for national standards are:

- Argentina: IRAM 2092-2-102 Safety of household and similar electrical appliances. Part 2-102 - Particular requirements for gas, oil and solid-fuel burning appliances having electrical connections
- Australia: AS/NZS 5263.0 Gas appliances - General requirements  
AS/NZS 5263.1.1 Gas appliances – Domestic Gas cooking appliances  
AS/NZS 60335.2.102  
AS/NZS 60335.2.6 and .1 in the case of dual fuel cooking appliances
- Canada ANSI Z21.1/CSA 1.1 Household cooking gas appliances
- China: GB 16410 Domestic gas cooking appliances
- Europe: EN 30 Series: Domestic cooking Appliance Burning Gas - Safety and Rational Use of Energy
- Israel: SI 6007 Domestic gas appliances for baking, cooking and grilling
- Japan: JIS S 2103 Gas cooking appliances for domestic use  
JIS S 2092 General construction of burning appliances for domestic use  
JIS S 2093 Test method for burning appliances for domestic use  
JIS S 2147 Portable cookers attached to liquefied petroleum gas cylinders  
JIS S 2148 Gas cylinders for portable cookers
- Korea,  
Republic of: KS B 8101 Test methods of gas burning appliances for domestic use  
KS B 8102 General constructions of gas burning appliances for domestic use
- New Zealand: AS/NZS 5263.0 Gas appliances - General requirements  
AS/NZS 5263.1.1 Gas appliances – Domestic Gas cooking appliances  
AS/NZS 60335.2.102  
AS/NZS 60335.2.6 and .1 in the case of dual fuel cooking appliances

Russia:	GOST R 50696 Domestic cooking appliances burning gas - general technical requirements and test methods
Saudi Arabia:	SASO 167 Methods of tests for domestic cookers for use with liquefied gas SASO 168 Domestic cookers for use with liquefied petroleum gases
Singapore:	Singapore Standard SS 401 : 1997 "Portable gas cookers - General specifications and test methods"
Turkey:	TS 616-1-1 Domestic cooking appliances burning gas - Part 1-1: Safety - General
USA:	ANSI Z 21.1 Household cooking gas appliances

The states of the art in the field of cooking industry are products of high quality tested against Standards with constructional, functional and safety requirements. All appliances should be type tested and manufactured in factories with quality and production control.

The latest innovation in the field of gas cooking appliances is the development of domestic gas hobs and ovens with electronic controls using dedicated software and sensor technology.

The stakeholders for ISO/TC 291 are the manufacturers of domestic gas cooking appliances, the manufacturers of controls and protective devices, the manufacturers of gas burners, gas suppliers, testing laboratories, and government and insurance representatives.

Other relevant Technical Committees which develop Standards in the field of domestic cooking appliances are IEC/TC 61 "Safety of household and similar electrical appliances" whose standards will be referenced for electrical safety and ISO/TC 161 "Controls and protective devices for gas and/or oil" whose standards will be referenced for the components of gas cooking appliances as well as the IEC/TC 72 "Automatic electrical controls".

Potential trade barriers are the world-wide different testing procedures which are referenced to different Standards. If ISO/TC 291 develops International Standards in the scope of domestic gas cooking appliances using existing Standards, when available (e. g. from ISO, ANSI, CEN and JISC), as a basis, it will be a significant benefit for industry, consumers and testing laboratories.

## **2.2 Quantitative Indicators of the Business Environment**

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the ISO/TC:

- The market for domestic gas cooking appliances is very wide due to the large number of domestic gas cooking appliances used. Export and import of domestic gas cooking appliances is a matter of individual business between appliances manufacturer, controls manufacturer and/or assembling factories.
- The economic value of Standards in this field cannot be related directly to the value of the production and the trade value of domestic gas cooking appliances. For sure, there is a cost reduction for each manufacturer if he can sell his products worldwide with one test and one test report, which cover all known safety aspects and all risks in using it.
- For example if the worldwide trade is only 1 million domestic gas cooking appliances and it can be saved 1 US\$ per piece in saving test procedures the advantage will be 1 million US\$ per year.
- But the savings are not only related to trade figures. Each accident with the use of domestic gas cooking appliances which can be prevented with a high safety level of domestic gas cooking appliances can save more than 1 million US\$.

### **3. BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC**

The benefit of an international standard for domestic gas cooking appliances is to guarantee a high level of safety, energy efficiency and quality characteristics to a product for its safe and environmental friendly use by a consumer. For this reason the standards must respond to, or are expected to respond to, the most recent changes and major innovations in the field.

Cost savings are also to be considered and the standards should take care of that. Timing of implementation of a new international standard will be improved through the optimization of the standard making process and increased and intensive use of electronic tools.

The standards are expected to be cited as normative references in the standards of the following Committees:

- IEC/TC 61 Safety of household and similar electrical appliances
- ISO/TC 161 Controls and protective devices for gas and/or oil
- IEC/TC 72 Automatic electrical controls
- ISO/TC 52 Light gauge metal containers
- IEC/SC 59 K Performance of household and similar electrical cooking appliances

**4. REPRESENTATION AND PARTICIPATION IN THE ISO/TC 291**

**Countries/ISO member bodies that are P and O members of the ISO committee**

## 5. OBJECTIVES OF THE ISO/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

### 5.1 *Defined objectives of the ISO/TC*

ISO/TC 291 is the responsible TC for developing and maintaining a package of International Standards under the rule of global relevance in the field of domestic gas cooking appliances, covering mechanical, electrical and/or electronic technology.

However, as the electrical and electronic requirements of IEC standard exists, ISO/TC 291 shall reference to the clauses and numbers of the appropriate IEC standard.

The standards will cover safety, constructional and performance requirements for type testing of domestic gas cooking appliances burning combustible gases. The standards will make normative references to the standards of the following Committees: ISO/TC 161 Controls and protective devices for gas and/or oil, IEC/TC 61 Safety of household and similar electrical appliances and IEC/TC 72 Automatic electrical controls.

ISO/TC 291 is entering a new phase of the standardization work as no international standards exist. The ISO/TC 291 will work on standards for safety and energy efficiency of domestic gas cooking appliances.

### 5.2 *Identified strategies to achieve the ISO/TC's defined objectives*

To develop a set of International Standards the following strategy is used:

- A set of International Standard addressing the safety of domestic gas cooking appliances intended to be used indoor will be developed with first priority.
- After the WG 1 finished the work for safety, a set of International Standard addressing the energy efficiency of domestic gas cooking appliance will be developed.
- Use of available national, regional or other relevant standards (such as IEC, CEN, ANSI, JIS, standards etc.) as source documents on which to base International Standards;
- The way in which the ISO committees work will be conducted by correspondence, physical meetings, webconferences, e-mail, Internet etc.
- The development of the safety standards will be done in Working Group 1.

For the development of standards for energy efficiency of domestic gas cooking appliance a further Working Group will be asked to be established.

## **6. FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE ISO/TC WORK PROGRAMME**

Many standards in this area of various member countries have been published nationally/regionally, and this might bring potential barriers for consensus as these may specify different testing procedures.

## 7. STRUCTURE, CURRENT PROJECTS AND PUBLICATIONS OF THE ISO/TC

Publications:

ISO/TS 21364-1:2021; Domestic gas cooking appliances — Safety — Part 1: General requirements

ISO/TS 21364-21:2021, Domestic gas cooking appliances — Safety — Part 21: Particular requirements for gas hobs, gas grills and gas griddles

ISO/TS 21364-22:2021; Domestic gas cooking appliances — Safety — Part 22: Particular requirements for ovens and compartment grills

### Information on ISO online

The link below is to the TC's page on ISO's website:

[ISO TC 291 on ISO Online](#)

Click on the tabs and links on this page to find the following information:

- About (Secretariat, Secretary, Chair, Date of creation, Scope, etc.)
- Contact details
- Structure (Subcommittees and working groups)
- Liaisons
- Meetings
- Tools
- Work programme (published standards and standards under development)

### Reference information

[Glossary of terms and abbreviations used in ISO/TC Business Plans](#)

[General information on the principles of ISO's technical work](#)