





Enhancing Knowledge SULTANATE OF OMAN

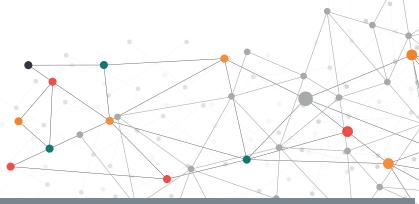
# **Executive Summary** of the

# E-Census

for Population, Residences & Establishments

2020

E-Census Documents
Series 2020





## His Majesty Sultan Haitham Bin Tarik

- may Allah protect him-

endorses E-Census 2020 results of Population, Residences and Establishments as of 12 December 2020. His Majesty the Sultan expressed his satisfaction with the outcome of this major project which was implemented as scheduled. His Majesty the Sultan underscored the significance of data and indicators provided by the Census in enhancing Oman Vision 2040, as well as the Census's important implications to developmental planning in all sectors of the Sultanate.

Table of Contents	Page	
1. Introduction	7	
2. The Legal and Regulatory Framework for the Census	8	
3. The Administrative Aspect	12	
4. The Technical Aspect of the Project	13	
The Basic Stages of Implementing the Electronic Census 2020	14	
Electronic Census 2020 Data Sources	16	
Data correction methodology in the electronic census 2020	18	
The Electronic System	28	
Electronic Connection with Data Sources	30	
e-Census Portal	32	
5. The Media Aspect of the Census Project	36	
6. Initiatives of the Electronic Census Project	37	
Civil Registry	38	
Employment	39	
Education	40	
Births and Deaths Registry	41	
Disability	41	
Establishments and Enterprises	42	
Buildings and Units	43	
Social Status		
7. Bulletins and Publications	44	
8. Conclusion:	46	

#### Introduction

In accordance with the Royal Decree No. (15/2015) to conduct an electronic census of population, residences and establishments for the year 2020, and in line with the recommendations of the United Nations to rely on official administrative records in conducting censuses, this census came in line with modern technical developments and relied entirely on the administrative records of government and private entities.

The electronic census 2020 is an embodiment of e-government and the fruitful cooperation between various government and private establishments in exchanging data and shifting from traditional censuses with a sustainable investment of available financial and technical resources to build an integrated statistical information system on population, residences and establishments based on national administrative records. The Country will use it in development planning, in following-up and governance of policies and procedures in various sectors, and in evaluating their impact over citizens. It is in order to strengthen the smart government in line with the objectives of Oman 2040 vision.

The Sultanate has presented a pioneering model in implementing the electronic census 2020 in terms of the volume of collected data and statistical indicators produced, within a short period and at a very low cost compared to the traditional census in terms of financial and human resources. It makes it easier for decision makers to obtain data related to the characteristics of population, residences and establishments in a timely and accurate manner, without the need to wait for a period of time up to (5 or 10 years) to conduct the census as usual in the traditional census.

On the fourteenth of December, the final results of the electronic census were approved by His Majesty Sultan Haitham bin Tariq - may Allah protect him. The e-portal of the electronic census has been inaugurated at the press conference to make data and information available for use in various plans and strategies in line with Oman 2040 vision.

# 2 The Legal and Regulatory Framework for the Census



The Royal Decree No. (15/2015) promulgated on 17 Rajab 1436 corresponding to 6 May 2015 represents the legal framework to conduct the Electronic Census Project 2020 of Population, Residences and Establishments, which mandated the formation of a Higher National Committee for the Census. The Census Technical Committee has been formed as well. It includes representatives of a group of concerned authorities in the Country. The Royal Decree No. (33 / 2020) promulgated on 28 Rajab 1441 corresponding to 23 March 2020 amending some provisions related to conducting the electronic census of population, residences and establishments for the year 2020 atttached to the Royal Decree (15/2015), by forming a higher national committee for the census under the chairmanship of the Minister of Interior, with the following competences:

1

Adopt the necessary methodology to implement the census, study the consequent procedures of the competent government authorities and take what is necessary to implement those procedures.

2

Approving a plan to mobilize the human and financial requirements necessary for the census procedure and taking the necessary measures to put it into practice.

3

Determining the information to be collected during the census in light of the needs of the various government authorities.

4

Expressing an opinion on the topics presented to it by the general supervisor of the census.

The Higher Committee held several meetings since the beginning of the project, which resulted in a number of decisions. The number of decisions approved by the Committee reached 74.

A technical committee for the census was formed as well under the chairmanship of the CEO of National Center for Statistics and Information, and the membership of the directors general of the concerned authorities and the executive management of the project. It is generally specialized in studying the project methodology, the plans emanating from it and the timing of its implementation, in addition to providing technical support and human requirements necessary to implement the project which are submitted to it by the Director General of the Census. It concerned with the following:

- Ways to provide the approved data basket for the project.
- Establishing work teams for the target databases.
- Reviewing the plans and stages of project implementation.
- Providing the necessary support and contributing to achieving the target data.
- Any other technical tasks that are put forward by the census management.

The media committee for the project was also formed under the chairmanship of the Undersecretary of the Ministry of Information and the membership of the concerned authorities. It is specialized in the following:

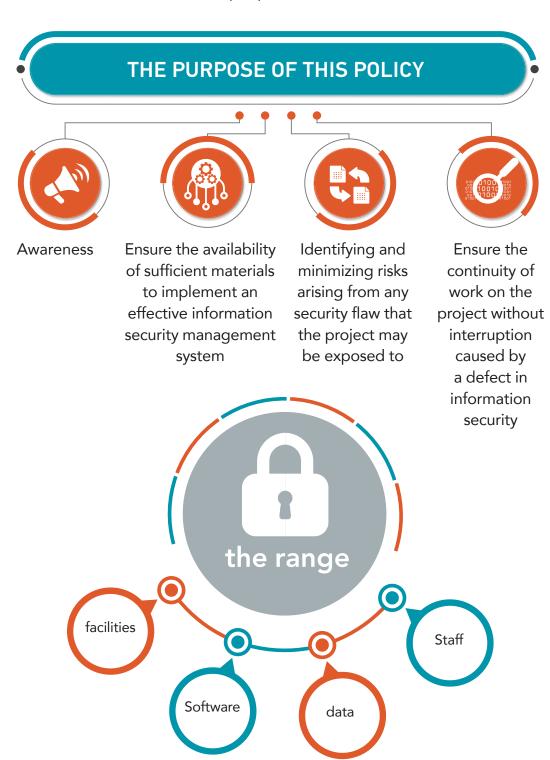
- Studying the draft media plan for the census prepared by the Census Management.
- Supervising the implementation of the census media plan after its approval, and ensuring its smooth implementation according to the specified method and the established time schedule.

It should be noted that the Royal Decree and the committees that emerged from it, had a role in speeding up the implementation of the project, improving data quality, amending some legislations with the concerned authorities, and applying recommendations to improve data quality and linking between agencies.

	Higher National Committee				
	Committee Chairperson				
	Minister of Interior				
	Me	emk	pership of:		
•	Minister of Health	•	Minister of Housing and Urban Planning		
•	Minister of Education	•	Minister of Transport, Communications and Information Technology		
•	Minister of State and Governor of Muscat	•	Minister of Economy		
•	Inspector General of Police and Customs	•	Minister of Social Development		
•	Minister of Information	•	Minister of Labour		
•	Minister of State and Governor of Musandam	•	CEO of the National Center for Statistics and Information		
•	Minister of Health	•	Director General of the Census Project (Secretary)		
			l Committee		
			e Chairperson		
			er for Statistics and Information		
			pership of:		
•	Electronic Census 2020	•	Ministry of Labor		
•	Minister of Interior	•	Ministry of Social Development		
•	Ministry of Education	•	Ministry of Housing and Urban Planning		
•	Royal Oman Police	•	Ministry of Transport, Communications and Information Technology		
•	Ministry of Higher Education, Scientific Research and Innovation	•	Council of the Administrative Affairs for the Judiciary		
•	Ministry of Health	•	National Center for Statistics and Information		
•	Ministry of Trade, Industry and Invest- ment Promotion	•	Nama Group		
	Med	dia	Committee		
	Comm	itte	e Chairperson		
	Undersecretary o	f th	e Ministry of Information		
	Me	emk	pership of:		
•	Electronic Census 2020	M	inistry of Information		
•	Royal Oman Police				
			Management		
			Electronic Census 2020		
	Project N		nagement Office		
	Experts				
	Data and Statistics				
			tion Systems		
			and Identity		
•	Individual Database	•	Higher Education Database		
•	operating database	•	Births and deaths database		
•	Social status database	•	Residences database		
	disability database school education database	•	Establishments database Higher Education Database		
•	SCHOOL Education database	•	Higher Education Database		

#### **Data Confidentiality Policy in the Project**

The statistical law emphasizes the importance of protecting personal data and use it only to achieve statistical objectives and to ensure the protection of data and information in the electronic census project. Accordingly, an information security document was prepared in the project, aiming to clarify the mechanism of information security management and the mechanism of collecting, using and preserving data of individuals that have been collected from government and private establishments on individuals, residences and establishments, while ensuring that this information reaches the authorized people to deal with this data and information.



# **3** The Administrative Aspect



The administrative and financial system for the electronic census project was issued under Resolution No. (1/2017) issued by the National Center for Statistics and Information.

According to Article (7) of the decree, on 10 Rabi' Al-Akhir 1438 corresponding to 9 January 2017



72 technical and administrative employees participated in the implementation of this census.

42 employees were appointed on temporary work contracts
Assigning (16) employees from various Government authorities
(14) employees in charge of work



Technical work teams were also formed within each concerned governmental and private establishments to provide the necessary support to the census project team.

# 4 The Technical Aspect of the Project

### The Goal of the Project



The censuses generally aim to prepare detailed statistics about the population, residences and establishments, prepare them and implement them through field enumeration in the case of the traditional census or by using administrative records in the case of the record count.



Sultanate of Oman has decided in 2020 to implement the record count and build an information system that depends totally on the administrative records. It enables to determine a list of population, residences and establishments, and to determine their characteristics according to a generally accepted statistical classifications and methodologies in the statistical field, and based on an approved basic data basket.



The system also enables data collection, processing and dissemination through the census portal.

# 1.4 | The Basic Stages of Implementing the Electronic Census 2020

The census is considered the broadest, most complex and costly statistical process. It is accomplished through a series of interrelated steps and continuous coordination with the participating authorities to ensure the implementation of all stages according to the approved timetable. After completing the preparation of the legal and financial basis, the preparatory work and the building work for the system and, then, publishing the results according the following stages:

1

2018 - 2017
Studying the data systems of the authorities and how to collect and update data.

Studying the structure of databases at the level of the authorities, the classifications and identifiers used and how to collect and update data.

2

2017-2019 Data Readiness Study

Study the quality of administrative records within the census laboratories and submit a proposal to correct identifiers and recommendations to improve data quality

3

2017-2019
Preparing
methodologies
for building
statistical
databases.

Defining
a statistical
methodology
for building the
most important
statistical databases
based entirely on
administrative
records (residence
address, education
and employment
characteristics,
establishments,
buildings an
units).

4

2019 - 2018
Determining
the inputs and
outputs of the
system and pass
tables between
classifications.

Preparing the structure of the authorities' data, variables and classifications.
Preparing pass tables between administrative and statistical classifications and preparing the most important outputs of the system: a list of tables, dashboards and data set.

5

2020 - 2018 Building the System

Preparing an information system that is updated through data from administrative sources (through linkage or through files) and performs a set of transfers (ETLs) linking data and building statistical databases.

6

2020 Linking with authorities

Electronic linking with authorities to ensure data collection in a timely manner: Whenever a variable is updated of the entity's data basket, the update is sent instantaneously to the system through the link.

2020 Experience of the system and the portal

Knowing the readiness of the system and the portal through conducting pilot censuses have been uploaded through it the files of the authorities, the results of the system were compared with the results of the laboratories, and recommendations were made to improve the performance of the system in terms of the time it takes and the extent to which the system takes into account statistical methodologies.

12-12-2020 Completing the Census

After ensuring the flow of data and the readiness of the system, a picture of the data was taken on 12 December 2020, and the statistical rules and indicators of the portal were updated

14-12-2020 Approval and **Publication of the Results** 

His Majesty Sultan Haitham bin Tariq, may Allah protect him, approved the results of the census on 14/12/2020.

During a press conference held on the same day, the most important indicators were announced and the electronic portal was launched that displays the detailed results of the census.

It should be noted that coincide with the preparatory stages, coordination work with the authorities was continuing to follow up on the correction of identifiers and linking with the data owners, as well as to follow up on the implementation of recommendations to improve data quality. These stages were accompanied by a media campaign directed to all citizens and residents with the aim of urging them on the importance of the process of updating data and its positive effects on drawing up development plans. Despite the conditions that the Sultanate has witnessed due to Corona pandemic, the census stages have been implemented according to the approved plans.

# 2.4 | Electronic Census 2020 Data Sources

The existence of high quality electronic administrative records that depend on unified identifiers is the basis for the Sultanate's transition to relying on administrative records to complete the 2020 Census. After studying the content and quality of records and developing a methodology for building statistical bases, the records are classified according to the owner of the statement and statistical uses, as follows:

Authority	File	The most important uses	
	individuals	Population characteristics (gender, age, (marital status, nationality	
Royal Oman Police	Addresses	Residence address, family, connection with the housing unit	
	family tree	Family, relationship to the reference person, marital status	
	visas	(On a wation (Summla manufam) Pagasumas	
	vehicles	(Operation (Supplementary Resources	
Ministry of Education	educational portal	Education characteristics (enrollment, type of education, educational level, specialization	
Ministry of Higher Education, Scientific Research and Innovation	ASAS	Education address	
	the workers	Employment characteristics (relationship	
Ministry of Labor	Job seekers	to manpower, profession, economic activity, employer, and current	
	retirees	(employment	
Ministry of Social Devel- opment	People with disabilities	Disability characteristics (type, cause, (degree	

Authority	File	The most important uses		
	Newborns	Newborn Characteristics (Supplementary (Data		
Ministry of Health	deaths	(Cause of death (Supplementary data		
	AlShifa Pulse	(Residence address (source for comparison		
The Council of the Administrative Affairs for the Judiciary (Notary (Public	Marriage and divorce documents	Marital status: a source for comparison		
	Accounts	Characteristics of units and buildings (oc-		
Namaa Holding Company	Account sites	(cupancy, type, use		
	Consumption	Unit address		
National Structure	land layer	Geographical matching of land, buildings		
	Building layer	and units		
Ministry of Housing and Urban Planning	lands	(Land characteristics (ownership, use, area		
	Establishments	Characteristics of actablishments and		
Ministry of Commerce, Industry and Investment	Enterprises	Characteristics of establishments and Enterprises (legal form, economic activity,		
Promotion	Activities	capital, address, year of establishment, (sector		
	Addresses	(Sector		
Oman Chamber of Commerce and Industry	Establishments	Grade		
Tax Authority	Establishments	Tax registration, sales number, profits		
Ministry of Labor	workers	Size of Establishment/Enterprise		
Willistry Of Labor	WOIREIS	Main Activity of Establishment/Enterprise		
Governors Office ((Municipalities	Establishments	The status of the Establishment/Enterprise		
	Activities	activity		

# 3.4 Data correction methodology in the electronic census 2020

Within the framework of analyzing administrative records and determining their readiness for statistical use, laboratories have been established at the census level to carry out:



study the coverage and quality of administrative records



comparing indicators extracted from administrative records with statistics



matching individuals' identifiers (civil number) and the identifiers of official

**Establishments and enterprises** 



Submit proposals to correct identifiers and characteristics



Provide recommendations to improve the quality of data collection & update



Propose statistical methodologies and data basket for each source



Build pass tables between administrative and non-administrative classifications

The average number of records processed quarterly is more than 75 million records located in 38 files received from authorities, including 30 million records for the identification data of population, 4 million records for manpower data, 3 million for education, 6 million for marital status, and 1 million Births and deaths, 12 million in establishments, and 19 million in unit records.

Rate of

million

records processed quarterly

million million million million million million births and in establishments records for the records for for for in unit identification manpower deaths marital education records data of data status population

#### References:

The best practices and recommendations in the field of data quality management were consulted according to the following references

Statistical data quality assurance framework for the countries of the Gulf **Cooperation Council** 

**Principles and** Recommendations for **Population and Residencies** Censuses of the United **Nations Statistics Division** 

Statistical data quality assurance framework adopted at the **European Union level** 

### Identification Data of Population

#### The most important achievement

- Determining a statistical methodology for building a base of population characteristics and determining the address of residence through administrative records
- Completing the matching of identification data for individuals among the approved authorities in the census
- Inclusion of the civil registry for the electricity account number as proof of the place of residence through an invoice request bearing the name of the service applicant (owner or tenant) when updating the data.
- Inclusion of the account number in the educational portal.
- It is mandatory to include the account number in residential and commercial lease contracts.
- Establishing pass tables between the classifications of the authorities and the statistical classifications.

Number of received records:

30 million

for each reference date

- Follow up on the completion of the inclusion of the electricity account number in the civil registry. Follow up on the unification of the classification of governorates and Wilayats, especially groupings among all administrative authorities.
- Follow-up inclusion and coverage of licenses for permanent and temporary workers accommodation
- Follow-up the completion of the addresses of expatriates, and monitor the inclusion of the Wilayat (Wilayat of Muscat in particular)

### **Manpower Database**

#### The most important achievement

- Determining a statistical methodology for building a manpower database through administrative records
- Completing the coverage of workers data by covering farmers, fishermen and vehicle owners
- Establishing pass tables between the classifications of authorities and the statistical classifications of the sector and professions

Number of received records: about

million

for each reference date

- Follow up completion of workers' coverage base at the level of Ministry of Labor
- Follow up completion of specialization in database of expatriates
- Follow up completion of all authorities for the Gulf classification of professions and coding.

### **Education Database**

#### The most important achievement

- Determining a statistical methodology for building a base of education characteristics through administrative records
- Completing the coverage of graduates (from 130,000 to about 330,000 Omani graduates)
- Initiating the inclusion of the specializations of foreign graduates at the level of Ministry of Labor data.
- Initiation of attestation and equivalency of academic degrees at the level of Ministry of Higher Education, Scientific Research and Innovation.
- Building a database for international school students.

Number of received records:

3
million
for each
reference
date

- Follow-up the educational portal's coverage for international school students
- Follow-up the educational portal's coverage for Omani students studying abroad

## **Social Status Database**

#### The most important achievement

- The most important achievement:
- Matching of Ministry of Justice data
- Comparing statistics with family tree data.

Number of received records: about

million

for each reference date

- Launching "Tawtheeq System" related to the Notary Public
- Linking of "Tawtheeq System" of the Notary Public with the Civil Registry of Royal Oman Police

# **Disability Database**

#### The most important achievement

 Completing the coverage of disability cases using the data of Ministry of Health (adding about 13 thousand people) with disabilities. Number of received records: about

47
thousand
for each
reference
date

#### the most important recommendations/procedures:

• Follow up coordination between Ministry of Social Development and Ministry of Health to complete coverage of disabilities

### Births and Deaths Database

#### The most important achievement

- Matching the data of Ministry of Health with the Civil Registry
- Assigning a civil number to the newborn when sending the birth notification
- Linking Ministry of Health and Civil Registry to ensure coverage of births

Number of received records: about

million for each reference

date

#### the most important recommendations/procedures:

Following up the process of immediate transmission of birth data to the Civil Registry instantaneously and directly

### The Establishments Database

#### The most important achievement

- Determining a statistical methodology for building a database of Enterprises and Establishments using administrative records.
- Matching and correcting the identifiers of Enterprises and Establishments
- Circulating the use of the national classification of activities to encode activities at the level of all municipalities
- Linking the worker to the activity and the activity place code at the level of the Ministry of Labor.

Number of received records:

12 million

for each reference date

- Completion of linking the municipal license to the activity location code.
- Inclusion of the electricity account number in commercial lease contracts and considering it an identifier of the address.
- Assigning a commercial registration number to all government Establishments and the location code for the activity of its branches.

### Residences Database

#### The most important achievement

- Defining a statistical methodology for building a database of units and buildings properties using administrative records
- Matching and correcting account owners identifiers (civil/ commercial register number)
- Improving the quality of accounts sites.

Number of received records: about

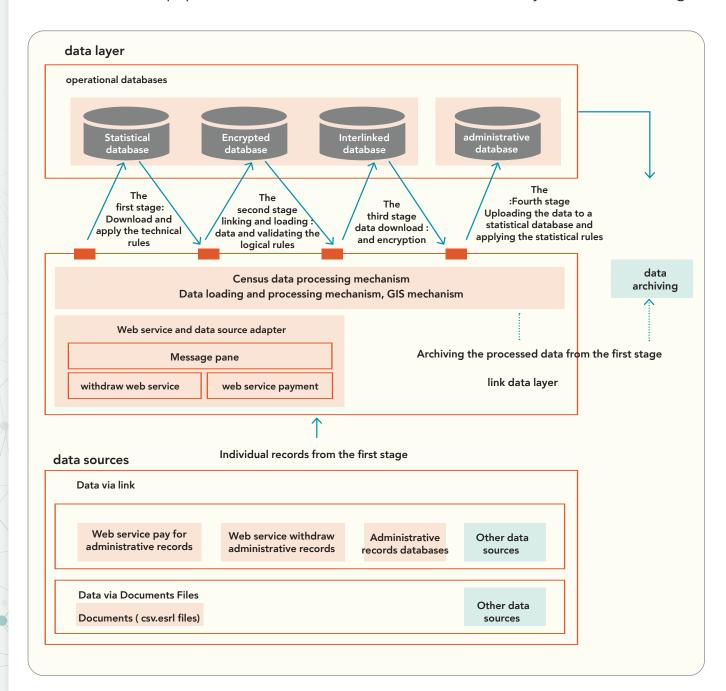
million

for each reference date

- Complete the correction of the identifiers of the account owners (10% of the accounts)
- Complete the missing coordinates of the accounts (about 40 thousand accounts).

## 4.4 The Electronic System

The electronic system for the census is an integrated information system about population, units and establishments. It links the relevant government authorities and covering more than a thousand variables and updated in a continuous manner through the flow of data through the electronic link or downloading files in a traditional way. This system ensures the continuity of data flow, then the application of pass tables between administrative and statistical classifications, and the application of the scientific methodologies adopted in the electronic census project to calculate official statistics on population, units, and establishments. The census system works in 4 stages:



#### The stage of Collecting Administrative Data:

This stage includes individual data with the metadata of the administrative records. Through this stage, the files of the authorities are uploaded and updated according to the agreed structure, whether through electronic link or by manual download. A number of technical standards are also verified (for example, verifying the validity of identifiers, the presence of mandatory data, and ensuring the accuracy of metadata) and the application of pass tables between administrative and statistical classifications. It should be noted that the geographical data of accounts, lands and buildings is also downloaded at this stage and its accuracy is verified through a set of projections and comparisons. This stage ends with identifying error records for each file with the error mentioned in each record, provided that this data is sent to the concerned authority for review or to be corrected inside the census laboratories and re-uploading them into the system. After completing the uploading of all administrative data, making sure that pass tables are applied and correcting data that do not comply with technical standards, the data is passed to the interconnected data stage.

#### **Data Link Stage:**

This stage is represented in linking the characteristics of population, residences, establishments and other statistical units and adding tables of relationships between individuals and establishments (investment relationship or operating relationship), and between individuals and units (ownership relationship or residence relationship) and between establishments, enterprises and units (ownership relationship or place Activity). Also, during this stage, the logicality of the data is verified through about 100 logical bases classified according to the type of the statement, which ends with storing the results according to the degree of error, defining the logical base and the list of data that do not respond to it. After completing the data link and knowing its homogeneity with the logical rules, a copy of the databases is passed to the encrypted data stage, after encrypting all the individual data (hiding the names and replacing the original identifiers with statistical identifiers that have no significance).

#### **Data Encryption Stage:**

This stage consists of an encrypted (anonymous) version of the interconnected databases that represents the main source for extracting statistical indicators.

#### **Creating Statistical Bases Stage:**

This stage consists in applying statistical methodologies to calculate the numbers of population, units, and establishments, and determine the characteristics, according to a specific reference date. The results are stored in the form of individual statistical databases as well as aggregate statistical databases that represent the source for publishing indicators through the portal. With reference to the existence of the time dimension in statistical databases, and whenever a new reference date is run, its results are added to the results of the dates that preceded it.

## **5.4** Electronic Connection with Data Sources

For the purpose of updating the census system data continuously and in real time, and in coordination with the data source authorities and Ministry of Transport, Communications and Information Technology, the census system has been electronically linked to most authorities. The data is sent from authorities on continuous basis, according to the pre-defined data and classifications which are structured with the census team. The system receives this data in a first stage in the databases designated for linking, and its technical quality is checked and then passed to the correct databases. As for the data that contains errors, they are kept separate in error tables for the purpose of correcting them and reloading them in the system. The authorities with which the system has been electronically connected are the following:

Authority	File Name	Number of Fields	Average Daily Updated (Records (April
	Individuals	36	2.794
Royal Oman Police	Addresses	28	7.348
	Family Tree	11	1.933
	Visas	9	2.224
Ministry of Health	Births	59	255
	Deaths	23	44
	Patients Daily Visit	43	24.064
Ministry of Education	School Pupils	33	16.232
Ministry of Higher Education, Scientific Research and Innovation	College & University Students	40	*

Authority	File Name	Number of Fields	Average Daily Updated (Records (April
	Establishments	5	63
	Establishments Address	27	63
	Establishments Capital	8	56
	Investors	8	37
Ministry of Commerce, Industry and	Legal Form of Establishments	4	63
Investment Promotion	Establishments Status	4	63
	Enterprises	3	72
	Enterprises Activity	7	146
	Enterprises Addresses	28	97
	Enterprises Status	5	98
	Workers in Private and Family Sectors	37	*
Ministry of Labor	Workers in Government Sector	37	*
	Job Seekers	13	4.705
	Retirees	15	*
Ministry of Social Development	People with Special Needs	30	15
	Electricity Accounts	25	8.012
Nama Group	Monthly Consume of Accounts	6	*
	Geographical Location	9	8.019

## 6.4 e-Census Portal

The e-Census Portal enables users from government authorities, community members, research centers and others to obtain statistical indicators in an available, fast and interactive manner, categorized into 3 Divisions:



Population section includes statistical indicators related to population, births, deaths, education, employment, job seekers and vehicles.

#### The most important

variables are: gender, age group, nationality, address, marital status, type of disability and its cause, enrollment status, educational level, specialization, relationship to the work force, occupation, and economic activity.



Buildings section includes statistical indicators for lands, units and buildings.

#### The most important

variables: land use, unit use, or building use), type (type of building or unit type), and occupancy (unit occupancy).

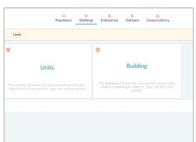


The Establishments section include statistical indicators about Enterprises, establishments and investors, the relationship between the investor and the Establishments

#### the most important

variables: legal form, economic activity, size, address, investor characteristics, type of investor, nationality and age)







#### Statistical indicators are presented in the portal in 4 ways:



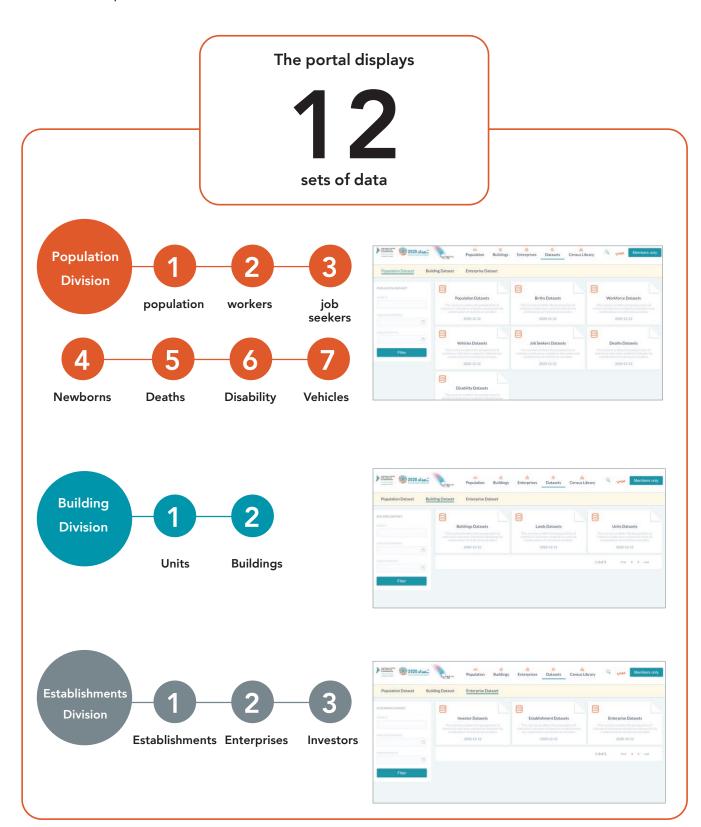


Data dashboards display a set of indicators according to the spatial dimension, using an interactive map of the Sultanate that enables the user to choose the authority (the governorate, the Wilayat or the community) and display all the indicators related to this authority. The portal displays 11 Data Dashboards, including a main Dashboards for the numbers of residents, units, establishments and the most important characteristics, and 10 detailed Dashboards according to the following table:

Division	Dashboards Name	Test Variables	The most important statistical variables
	Total Population	Nationality	Age group, gender, work force relationship, educational level and marital status
	Omanis		
	Expats		
	Total of Workers		
Population	Workers in the Private Sector	Nationality and Sector	Gender, age group, sector, profession, activity, organization size and legal form
	Job Seekers	Educational Level	Gender, age group, educational level and specialization
Duithia	Units	Buildings or Units	Type, use and
Buildings	Buildings		occupancy
	Enterprises	Enterprises or Estab-	Sector, size, economic
Establishments	Establishments	lishments	activity and legal form

# B Data Set

They are detailed databases that include a set of statistical variables that enable the user, in an interactive way, to identify specific interrelationships between the variables, prepare statistical tables and export them later in different formats.





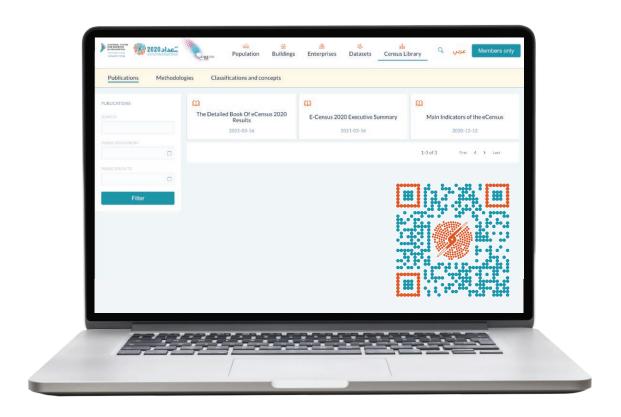
They are a set of the most important statistical tables accompanied by conclusions that can be exported in different formats and classified according to two levels:



- First level: by main section (population, buildings and establishments)
- Second level: by subsection: population, births, deaths, education, workers and job seekers for the Population. Buildings and Units for Buildings Department. Establishments and Profit enterprises Department, and non-profit establishments for the Establishments Department.



The census library includes the statistical bulletins that were prepared at the level of the census team. It also provides documents of methodologies and classifications used at the system level.



# **5** The Media Aspect of the Census Project



The project launched its visual identity at the Communications and Information Technology Exhibition COMEX 2019, whose vocabulary was inspired by the cultural and historical heritage of the Sultanate through the semantic use of the astrolabe tool that was used in maritime navigation to identify destinations and places.

Employing the indicator in the logo represents a measure of data quality in terms of determining the level of coverage and comprehensiveness, and the mechanism of updating and matching, while the distribution of its parts and colors symbolizes the flexibility of data transmission electronically and directly from various sources and records and their interrelationship to form an integrated system.

In an effort to spread the culture of updating data and creating continuous social media, the project launched, in an expanded media meeting, a national campaign under the name - Your Data is Your Identity, which aims to urge citizens, residents and establishments in various parts of the Sultanate to update their data and ensure its accuracy and comprehensiveness with a number of competent authorities. This is to provide national records with updated and accurate data on population, housing and establishments, as well as to enhance societal and institutional participation in the service of sustainable development goals in the Sultanate.



# 6 Initiatives of the Electronic Census Project

The census project and through its laboratories worked on many initiatives with government and private authorities

#### First:

Building a national system of records: an integrated system that updated automatically

Building a statistical data system

### Second:

Matching and correcting data according to the approved identification data (population civil number and commercial registry number for establishments).

Unifying the classifications and codes used in the different authorities by pass tables between the various statistical and administrative classifications in the authorities. This is to ensure data integration and coherence between the various databases.

Improving the procedures followed in the authorities (data sources) and adding new fields to the authorities databases.

### **Civil Registry**

- Adding and activating the electricity account field and housing type within the address data in the civil registry.
  - Requesting the electricity account number in the Civil Status Register of the Royal Oman Police to prove the current residence of Omanis and expatriates by launching a window on the Royal Oman Police website to facilitate the procedures for linking the current address to the electricity account number.
- Determining the criteria for calculating the Gulf population residing in the Sultanate and including them within the population statistics that the National Center for Statistics and Information publishes periodically.
- Submitting a recommendation to amend the Civil Status Law to obligate the issuance of a personal card for those who have reached the age of (10) years for both genders.
- Issuance of a civil number for a live newborn immediately after receiving the birth notification from the Ministry of Health, which is directly reflected in the population data in the Civil Status of the Royal Oman Police.
  - All government and private establishments read the identification data electronically from the civil registry system of the Royal Oman Police.
- t is mandatory to link all parental and marital relations for expatriates

#### **Employment**

- Ministry of Labor has built a unified database for the manpower that includes all Omani and expatriate workers in both civil and private sectors, whether they are on permanent or temporary contracts, job seekers, and retirees.
- Building a comprehensive database of manpower for all Omani and expatriate residents working in all sectors in Census Lab (permanent contracts and temporary contracts), which includes all the economically active (working in all sectors, regular and informal farmers, fishermen, craftsmen, and utility vehicle drivers), active job seekers, as well as economically inactive (retired, and inactive job seekers).
- Mandatory registration of expatriates specialization who are holding a university diploma or higher in the system of Ministry of Labor and Royal Oman Police
- It is mandatory to make ceritification and equivalency of academic certificates submitted by expatriates working in the Sultanate in the Ministry of Higher Education, Scientific Research and Innovation in cooperation with Royal Oman Police and Ministry of Labour, taking into account the speedy procedures for certification.
- Attestation of professional certificates by the Ministry of Higher Education, Scientific Research and Innovation.
- Registration of workers in private schools and community schools in the Ministry of Labor.
- Linking establishments and workers in the Ministry of Labor with the place of activity code with the Ministry of Commerce, Industry and Investment Promotion and including the main branch number in the data of the Ministry of Labor
  - Encouragement towards the establishment of labor cities to ensure a better management of the residence of expatriate laborers who are not linked to a family, to reduce the spread of the phenomenon of random gatherings of expatriates, taking into account security, economic and social aspects.
- Formation of a working team under the chairmanship of the Ministry of Housing and Urban Planning and the membership of the Ministry of Interior, Ministry of Economy, Ministry of Labor, Royal Oman Police, and the General Authority for Special Economic Zones and Free Zones. It studies the subject in all its aspects and provides the necessary controls and procedures to achieve it through a timetable and a clear work plan.

#### **Education**

- Coverage of Omani graduates from educational institutions in the Sultanate based on the statistics of graduates, as (200) thousand Omani graduates have been added to ASAS database.
  - Monitoring the population in the database of Royal Oman Police who are of school age and who are not in the educational portal data, in the following cases: (students abroad / disability / death / others).
  - All educational institutions link all their data for students and graduates with ASAS database, and ensure that they are periodically synchronized. Agreement with the Ministry of Higher Education on the obligation of higher education institutions to read the identification data electronically from Khatm System of Royal Oman Police, to ensure the quality of the data.
- Building a window in the educational portal for students studying abroad, and the obligation to register abroad students in the school education stage at the educational portal.
- Building a database for international schools (communities), and obligating these schools to send students' data to the Ministry of Education.
  - Adding and activating the electricity calculation field within the databases of the Ministry of Education.
    - Building a unified base for Omanis and expatriates in the census variables that reflect all educational characteristics, whether for school education or higher education, as well as the illiterate and those who can read and write without obtaining any educational qualification.
- Ministry of Education and Ministry of Social Development work together to find an implementation mechanism for what is stated in Article (36) of Chapter Five (Educational Rights) of the Child Law issued by Royal Decree No. (22/2014).

### Births and Deaths Registry

Issuing a civil number for a live birth immediately upon receipt of the Civil Registry at the Royal Oman Police and notification from the Ministry of Health.

Study and complete the shortfall in coverage of births and deaths for Omanis and expatriates to ensure that there are no differences between the Civil Status Register of the ROP and the Ministry of Health

Complete linking all government and private establishments to the data of the Ministry of Health that feeds the civil registry with the facts of birth and death in a timely and periodic manner.

Formation of a working group consisting of the Ministry of Health, the Royal Oman Police and the municipalities to study the creation of a regulation to organize the work of cemeteries and burial procedures in the Sultanate.

Corresponding and correcting the data of the Ministry of Health with their identification data in the Civil Status Register of Royal Oman Police.

### **Disability**

Registrars at the Ministry of Social Development renew the social security card every (3) years, and the card of people with disabilities every (5) years.

Working on linking the medical reports included in the disability classifications between the Ministry of Health and the Ministry of Social Development.

Building a special base for disability from various Omani data sources in the census laboratories.

### Establishments and Enterprises:

- Insertion of the commercial registration number and place of activity code for law firms, consulting firms, craft professions and non-profit establishments (such as sports clubs, charitable societies, community schools and government establishments).
  - Electronic linking between the Ministry of Commerce and Industry and each of the Ministry of Regional Municipalities and Water Resources, Dhofar Municipality and Sohar Municipality, in order to link the municipal license to the activity place code and use the national classification of economic activities automatically.
- Obligating the municipalities to build licensing databases for the residences of expatriate labors (permanent and temporary) to include the location, the electricity account and the names of its residents.
  - Unification of municipal procedures through the formation of a working group chaired by the Ministry of Interior and the membership of representatives from the Governorate of Muscat, the Office of the Minister of State and Governor of Dhofar, the Office of the Minister of State and Governorate of Musandam to work on completing the unification of municipal procedures for all the governorates of the Sultanate and to consider a study linking municipal databases with the electricity companies of Nama Group.
- Adding and inserting the electricity account number as a mandatory field in the data and contracts of residential and commercial leases in the municipalities.
- Linking the non-profit establishment to the electricity account number.
- The number of rooms field in the building completion certificate service has been mandatory added in the new system.

### **Buildings and Units**

Obligating the purchaser of land with a residential or non-residential building to transfer the electricity account in the name of the new owner before receiving the ownership document as of October 15, 2020. Ministry of Housing and Urban Planning directed all directorates in the governorates in all departments or divisions of the real estate registry to start documenting legal disposition contracts transferor of ownership in the existing buildings in front of the legal notary. Payment of the fees prescribed by law, and providing him with a letter to the competent electricity company in which the new buyer, before receiving the ownership document officially stating the transfer of the electricity meter account in his name.

Requiring all authorities in the residential communities approved by the Ministry of Interior, the Governorate of Muscat, and the offices of the Ministers of State, Governors of Dhofar and Musandam.

Obligating the electricity companies not to issue a commercial or industrial tariff except with the presence of the name and commercial number of the facility.

Correcting nearly 900 thousand electricity accounts in terms of civil numbers, owners of electricity accounts.

#### **Social Status**

Building a special base for social status from various data sources, Omanis & expatriates

## **7** Bulletins and Publications

One of the objectives of the electronic census project is to publish statistical data and indicators by the end of 2020. The project has worked on publishing a set of versions of the results of the electronic census 2020 including the most important characteristics of the population, residences and establishments

#### **List of Publications:**

- Electronic census results 2020
- The main indicators of electronic census
- Detailed results of the electronic census attached to an executive summary
- Electronic Portal





portal.ecensus.gov.om



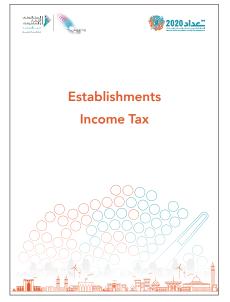


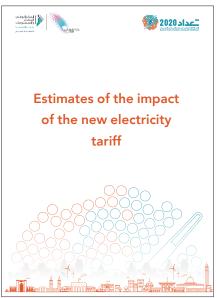


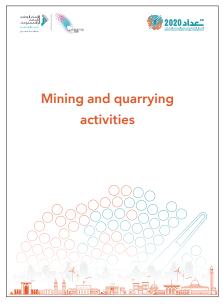
#### The most important reports that have been approved are as follows:

- Small and medium enterprises
- Social security
- Job seekers
- Mining and quarrying activities
- Income tax on establishments.
- Employment movement during 2010-2020
- The impact of the new electricity tariff on Omani families

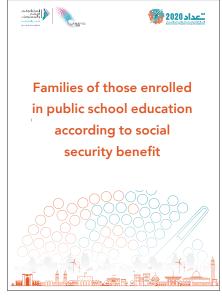
- Social security students in government schools
- Number of Omani workers in private sector establishments
- Study of registering of private sector establishments in Riyada.

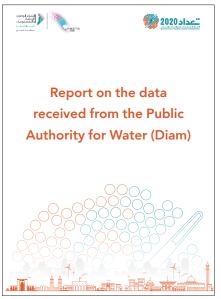












### **Conclusion:**

The Sultanate has moved in the method of collecting population, residences and establishments census data from the traditional costly and complex approach, to a modern approach that relies on data collection through administrative records. After the completion of the 1993, 2003 and 2010 censuses through field work, the 2020 Population and Residences and Establishments Census was completed relying entirely on administrative records and, thus, the Sultanate has become among few countries at the global level and the first in the Arab world in this field.

The most important factors contributing to this success are the presence of a legal framework that helped coordinate the participatory work between the census project and government agencies, as well as the presence of high quality electronic administrative records that depend on unified identifiers as the basis for this transition.

The census laboratories worked, in a first stage, to correct identifiers, improving the quality and coverage of the entities' databases. Then building an integrated system linked electronically with the authorities directly and electronically, comprising three databases of population, residences and establishments, forming an interconnected database to produce the statistical database.

Also, through the 2020 census, an electronic portal was built that covers, and in an interactive way, the official indicators about Population, education, workforce, births, deaths, disability, units, buildings, lands, institutions, facilities and vehicles.

Given the presence and interrelationship of most government authority data, the census system can be considered a national records base that helps improve administrative services and simplify procedures. In order to ensure the continuity of this system, as a base for the production of official statistics and a national records base, it is necessary to continue updating it and applying the recommendations of the Higher Committee and its committees and the initiatives adopted by the project.

### **E-Census Documents** Series 2020

