TEMPLATE INSTRUCTIONS

1. It is not compulsory to fill in the template if additional documentation is provided that clearly indicates the answers to the questions required in it.

2. This google sheet document has been developed as part of the ARDIG project to make an inventory of national surveillance & monitoring systems on antimicrobial sales/usage (AMU) and antimicrobial resistance (AMR) in humans, animals and food in national level through 6 different countries (Spain, Netherlands, France, United Kindom, Norway and Germany).

3. The template is formed mainly by 9 sheets which can be viewed in the bottom part as tabs:

Starting sheet:	It is the current one and gives some instructions to fill the whole template.
Humans-AMU:	This sheet collects general data about antibiotic use in humans. This sheet is structured in such a way that the information from a data collection system can be added. If the country has more than one system, you must duplicate the sheet (click left mouse button on the "Humans" tab and click on duplicate) as many times as you have systems, collecting the information of each system in a different sheet.
Humans-AMR:	This sheet collects general data about antimicrobial resistance in humans. This sheet is structured in such a way that the information from a data collection system (Surveillance, Monitoring, Screening) can be added. If the country has more than one system, you must duplicate the sheet (click left mouse button on the "Humans" tab and click on duplicate) as many times as you have systems, collecting the information of each system in a different sheet.
Animals-AMU:	This sheet collects general data about antimicrobial sales/usage (AMU) use in animals. This sheet is structured in such a way that the information from a data collection system can be added. If the country has more than one system, you must duplicate the sheet (click left mouse button on the "Animals" tab and click on duplicate) as many times as you have systems, attaching the information of each system in a different sheet.
Animals-AMR:	This sheet collects general data about antimicrobial resistance (AMR) in animals. This sheet is structured in such a way that the information from a data collection system (Surveillance, monitoring, clinical isolates) can be added. If the country has more than one system, you must duplicate the sheet (click left mouse button on the "Animals" tab and click on duplicate) as many times as you have systems, collecting the information of each system in a different sheet.
Food:	This sheet collects available data of food isolates (including retail). Years (separated by commas) for which data on a pathogen are available in a food matrix should be noted in this table. Other food matrixes and pathogens may be added to the table if it is considered interesting.
Panel_Bacteria / Antimicrobial:	One table like this must be completed for each system on AMR. Other bacteria and antibiotics may be added to the table if it is considered interesting.
Bacteria / Animal population:	Years (separated by commas) for which data on a pathogen are available in a population type should be noted in this table. Other bacteria may be added to the table if it is considered interesting.
Population / Year	One table like this must be completed for each system on AMU.

4. Please, send the template back as soon as it is filled.

*Short vocabulary lists have been used to facilitate the work of filling in but more can be added if necessary. Specifically, the list of antibiotics is based on the WHO AGISAR recommendation.

Antimicrobial use / Consumption data / Sales data in humans			
Information required	**Availability of data**	**Comments**	**Data**
Database system name			
Database system acronym			
Type of system (Surveillance, Screening, Monitoring)			
Which country does the data come from?			
Which is the data source?			
Which is the organisation in charge of the database system?			
Who is the funding organisation?			
Who is the contact person in the organisation?			
Type of data level provided in the database			
Is continous data from 2014 to 2017 available? If not please provide information on changes!	Yes		
At which level is the antimicrobial information available?			
Unit of measurement (ATC/DDD). If other unit is used, please comment it	Yes		
Is there a protocol description? If 'Yes', please send it.	Yes		
Is the administration route available?	Yes		

Antimicrobial resistance data in humans

Information required	Availability of data	Comments	Data
Type of data level provided in the database	Line level		
Database system name			
Database system acronym			
Type of system (Surveillance, Monitoring, Screening)			
Which country does the data come from?			
Which is the data source?			
Which is the organisation in charge of the database system?			
Who is the contact person in the organisation?			
Is continous data from 2014 to 2017 available? If not please provide information on changes!	Yes		
Is variable "Age" available?	Yes		
Is variable "Gender" available?	Yes		
Is denominator data available?	Yes		
Is specimen type data available?	Yes		
Where do the data come from? (Laboratory or hospital)			
Does the database provide information on the hospital type (primary, secundary, tertiary, specialised) where samples were collected?	Yes		
Are subsets of medical specialities available in the database?	Yes		
Is there any system to avoid isolate duplication? If "Yes" please provide a description	Yes		
Data from Community - Medical practice (Sampling point)	Yes		
Data from Hospital-Ambulatory (Sampling point)	Yes		
Data from Hospital-Inpatient (Sampling point)	Yes		
Data from Hospital-ICU (Sampling point)	Yes		
Which antibiotic test method is used?	Yes		
Is the antibiotic test method the same for all isolates in the dataset? If not, please comment.	Yes		
Are quantitative test results provided?	Yes		
Are qualitative test results provided?			
Are cut-offs of qualitative test results available?	Yes		
Is there a fixed antibiotic panel (Standard) for each bacterium?	Yes		
Panel of Antibiotics vs Bacteria. Use one table per system (fill only those bacteria with more than 30 isolates available in the system database)	Yes		Panel_Bacteria / Antimicrobial
Is there a protocol description? If 'Yes', please send it.	Yes		
How many hospitals/practices are roughly participating?	Yes		
How many labs are participating per year?	Yes		
Is there an external quality assurance (EQA) system in place?	Yes		
Type of standard used. If "other" please explain in the comment field	Yes		

Antimicrobial use / Consumption data / Sales data in animals

Information required	Availability of data	Comments	Data
Database system name			
Database system acronym			
Type of system			
Which country does the data come from?			
Which is the organisation in charge of the database system?			
Who is the funding organisation?			
Who is the contact person in the organisation?			
Type of data level provided in the database			
Is continous data from 2014 to 2017 available? If not please provide information on changes!	Yes		
At which level is the antimicrobial information available?			
Describe the unit of measurement and how it has been calculated			
Is there a protocol description? If 'Yes', please send it.	Yes		
Is information by animal species and subpopulation (e.g. calves vs. dairy cows) available?	Yes		
Do you have data on population vs year listed in the following table?			Population / Year
Is dosage available?	Yes		
Is the purpose of antimicrobial use available?	Yes		
Is the administration route available?	Yes		

Antimicrobial resistance data in animals

Information required	Availability of data	Comments	Data
Type of data level provided in the database			
Database system name			
Database system acronym			
Type of system			
Which country does the data come from?			
Which is the organisation in charge of the database system?			
Who is the contact person in the organisation?			
Is continous data from 2014 to 2017 available? If not please provide information on changes!	Yes		
Is there a protocol description? If 'Yes', please send it.	Yes		
Panel of Antibiotics vs Bacteria. Use one table per Lab (fill only those bacteria with more than 30 isolates available)	Yes		Panel_Bacteria / Antimicrobial
How many clinical isolates are collected per healthy animal sample?	Yes		
Is information on Sample material available?	Yes		
How many isolates are collected in the country?	Yes		
Is there a fixed antibiotic panel (Standard) for each bacterium?	Yes		
Is sampling strategy available?	Yes		
Protocol of sample collection	Yes		
Sample size	Yes		
Which is the place of sampling / sampling point?if several, please comment it	Yes		
Sampling plan	Yes		
Which antibiotic test method is used?	Yes		
Is the antibiotic test method the same for all?	Yes		
Are quantitative test results provided?	Yes		
Are quanlitative test results provided?	Yes		
Are cut-offs of qualitative test results available?	Yes		
Prevalence of resistance in bacteria from target population (denominator: isolate)	Yes		
Prevalence of resistant bacteria in target population (denominator: sample)	Yes		
What kind of study on consumption of antimicrobial agents by animal species has been applied?	Yes		
Is the type of disease for which the clinical isolate was taken available?	Yes		
How many labs are participating per year?	Yes		
Are ring trials done between labs?	Yes		
Is a quality assurance system in place available?	Yes		
Type of standard used. If "other" please explain in the comment field	Yes		

Food/Bacteria	*E.Coli*	*MRSA*	*Salmonella*	*Enterococcus*	*Campylobacter*	
Legumes						
Fruit						
Milk						
Eggs						
Turkey meat						
Broilers meat						
Pig meat						
Cattle meat						
Veal meat						
Sheep meat						
Goat meat						
Cereals						
Seafood						

System name:

Bacteria / Antimicrobial	*Acinetobacter baumannii Complex*	*Campylobacter coli*	*Campylobacter jejuni*	*Campylobacter sp*	*Citrobacter freundii*	*Clostridium difficile*	*Enterococcus faecalis*	*Enterococcus faecium*	*Enterococcus spp.*	*Escherichia coli*	*ESBL-E.coli*	*Klebsiella oxytoca*	*Klebsiella pneumoniae*	*Pseudomonas aeruginosa*	*Salmonella enteritidis*	*Salmonella sp*	*Salmonella typhimurium*	*Staphylococcus aureus*	*Staphylococcus epidermidis*	*MRSA*	*Mycobacterium tuberculosis*
Amoxicillin																					
Ampicillin																					
Azithromycin																					
Cefatoxime or Ceftriaxone																					
Cefepime																					
Cefoxitin																					
Ceftazidime																					
Chloramphenicol																					
Ciprofloxacin																					
Clindamycin																					
Colistin																					
Daptomycin																					
Erythromycin																					
Gentamicin																					
Imipenem																					
Linezolid																					
Meropenem																					
Nalidixic acid																					
Nitrofurantoin																					
Oxacillin																					
Pefloxacin																					
Penicillin																					
Quinupristin-dalfopristin																					
Rifampicin																					
Streptomycin																					
Sulfisoxazolex																					
Teicoplanin																					
Temocillin																					
Tetracycline																					
Tigecycline																					
Trimethoprim																					
Vancomycin																					

Bacteria / Population	*Acinetobacter baumannii Complex*	*Campylobacter coli*	*Campylobacter jejuni*	*Campylobacter sp*	*Citrobacter freundii*	*Clostridium difficile*	*Enterococcus faecalis*	*Enterococcus faecium*	*Enterococcus spp.*	*Escherichia coli*	*ESBL-E.coli*	*Klebsiella oxytoca*	*Klebsiella pneumoniae*	*Pseudomonas aeruginosa*	*Salmonella enteritidis*	*Salmonella sp*	*Salmonella typhimurium*	*Staphylococcus aureus*	*Staphylococcus epidermidis*	*MRSA*	Mycobacterium tuberculosis
Cattle (bovine animals) - calves (under 1 year)																					
Cattle (bovine animals) - dairy cows																					
Cattle (bovine animals) - meat production animals																					
Cattle (bovine animals) - meat production animals - suckler cows																					
Cattle (bovine animals) - unspecified																					
Gallus gallus (fowl) - broilers																					
Gallus gallus (fowl) - broilers - unspecified																					
Gallus gallus (fowl) - laying hens																					
Gallus gallus (fowl) - unspecified																					
Pigs																					
Pigs - breeding animals																					
Pigs - fattening pigs																					
Pigs - unspecified																					
Turkeys - unspecified																					
Turkeys - fattening flocks																					
Turkeys - breeding flocks, unspecified																					

System name:

Population / Year	*2014*	*2015*	*2016*	*2017*
Cattle (bovine animals) - calves (under 1 year)				
Cattle (bovine animals) - dairy cows				
Cattle (bovine animals) - meat production animals				
Cattle (bovine animals) - meat production animals - suckler cows				
Cattle (bovine animals) - unspecified				
Gallus gallus (fowl) - broilers				
Gallus gallus (fowl) - broilers - unspecified				
Gallus gallus (fowl) - laying hens				
Gallus gallus (fowl) - unspecified				
Pigs				
Pigs - breeding animals				
Pigs - fattening pigs				
Pigs - unspecified				
Turkeys - unspecified				
Turkeys - fattening flocks				
Turkeys - breeding flocks, unspecified				