

## EARL de ROQUEDOR

### A - FARM

#### CHAPTER A0: General information

ID.	Requisite	Data
A01	Contact person (name, email)	Clement Touzouli
A02	Farm name	EARL de Roquedor
A03	Address and Country	La Bourdette 32380 PESSOULENS
A04	Experience in farm demonstration activities (years)	It was responsive in a connected farm. 1 group visit every year
A05	Land drainage if yes, water collectors	<input type="checkbox"/> yes <input type="checkbox"/> yes
A06	Practicability of fields in case of rain	<input type="checkbox"/> yes

#### CHAPTER A1: Structure of the farm

ID.	Requisite	Data
A11	Kind of soil (knowledge on soil analysis and composition)	<input type="checkbox"/> yes <b>Argile 43.3%</b> <b>Sand 15.4%</b> <b>Limons 34.4%</b> <b>Limestone 5.7%</b> <b>MO 1.2%</b>
A12	Soil slope	Approx % : 0 to 15%
A13	Hedges and / or ecological infrastructures	<input type="checkbox"/> yes
A14	Stable grassland	<input type="checkbox"/> yes

## CHAPTER A2: Focus on farm

ID.	Requisite	Data			
A21	Land without cultivation	Area (ha)			
	Total	Approx 6%			
A22	Arable crops	Organic farming Area (ha)		Integrated crop management farm (ICM) Area (ha)	
	Soybean				
	Wheat				
	Total (ha)			Approx 105 ha	
A23	Vegetable crops	Open field		Green house	
		Organic Area (ha)	ICM farm Area (ha)	Organic Area (ha)	ICM farm Area (ha)
	Hop				
	Red corn				
	Total (ha)	Approx 1 ha			
A25	Orchard	Organic farming Area (ha)		ICM Farm Area (ha)	
	Crop 1			Walnut	
	Total (ha)			Approx 35 ha	

## CHAPTER A3: Description of farm equipment

ID.	Requisite	Data
A31	Machines for soil tillage	<input type="checkbox"/> yes
A32	Machines for weed control	<input type="checkbox"/> yes
A33	Irrigation system(s) Please specify:	<input type="checkbox"/> yes
		Pivot irrigation (remote control)
		Spray irrigation (walnut tree)
		Reel type
A34	Equipment with remote control Please specify:	<input type="checkbox"/> yes
		Remote controlled irrigation system by variable speed drive Shneider electric ATV620
		Electrical valve
A35	Livestock and pastures	<input type="checkbox"/> no
	-Radio frequency ID -Automated milking, feeding, and monitoring systems	<input type="checkbox"/> no
A36	Precision farming facilities	
	-Precision Application technologies (If yes specify)	✓ yes
		Irrigation equipment that allows precision irrigation. (GPS sensors, connected solenoid valve, water meter, frequency converter shneider electric...)
		The sotware Fied view to modulate inputs
	-Data acquisition technologies (If yes please specify):	✓ yes
		Software developed by the farm. Download and analyze data from Sentinel 1 and Sentinel 2.
		Climate Field View
		Capacitive probes Sentek (agralis)
	Yield Sensor CASE	
	Conductivity map (Corhise)	

	Drone
-	Field camera Weather station
-Data analysis & evaluation technologies (If yes specify):	✓ yes
	Sound Wave Diffuser (Genodics): evaluation technologies to stimulate growth and struggle against Anthracnose
	Data analysis & evaluation technologies constantly on Radar and optical data from satellite
-Others (specify)	✓ yes
	cameras
	Initiation of the silo ventilation controlled by a probe
A37	If the answer in A36 is "no", do you have availability of data and information from private / public database? ✓ yes

#### CHAPTER A4: Description of facilities

ID.	Requisite	Data
A41	Irrigation connections on field head	<input type="checkbox"/> yes
A42	Electricity in field availability	<input type="checkbox"/> yes
A43	Electrical generator availability	<input type="checkbox"/> yes
A44	Availability of tractors / machines equipped with GPS system	<input type="checkbox"/> yes
A45	Availability of machines for harvest. If yes specify for which crop(s):	<input type="checkbox"/> yes Walnut tree Cereal
A46	Availability of refrigerated cells for storage and conservation	<input type="checkbox"/> <b>Actually, fan system for cereal cells, Study to invest a refrigerated cells system for storage</b>



A47	Availability of mechanical workshop: fixing ups, soldering, etc.	<input type="checkbox"/> yes
A48	Availability of a storehouse with latch for equipment...	<input type="checkbox"/> yes
A49	Possibility of connection for data transmission (3G, 4G, others) a	<input type="checkbox"/> no <b>ADSL : 30Mbps</b>  <b>4G will be available over the whole surface of the farm</b>
A50	Other devices, data, equipment availability Please specify:	<b>3G Sigfox are available</b> <b>WIFI is available over a part of the farm</b>

## CHAPTER A5: Other conditions

ID.	Requisite	Data
A51	<p>Demo site profile:</p> <ul style="list-style-type: none"> <li>- Implementation of a solution in living conditions simply with practical feedbacks</li> <li>- Experimentation and test of the solution with technical/scientific support and assessment feedbacks</li> <li>- Existence of a formalized service offer</li> </ul>	<p>✓ yes    <input type="checkbox"/> no</p> <p>✓ yes    <input type="checkbox"/> no</p> <p>✓ no</p>
A52	<p>Conditioned access to particular equipment (please specify)</p> <p>In case of special equipments requiring a certified experience, the final user/SME should demonstrate a specific training / license to use it in compliance with National/local laws</p>	<p>✓ no</p>
A53	<p>Availability of experienced staff to carry out and support field test trials</p>	<p>✓ yes    <input type="checkbox"/> no</p>
	<p>How many experimentation/demonstration activities are developed on average /year?</p>	<p>3</p>
	<p>How many qualified experts (technicians/researchers) are available?</p>	<p>1</p>
	<p>Objective is to develop the experimental domain in the long term while continuing to have a profitable and innovative farm</p>	
A58	<p>The EARL DE ROQUEDOR site has been a family business for several generations. It is a cereal and tree farm. After many trials in various specialized productions, 30 years ago the first walnut trees were planted. The farm now has 35 hectares of orchards and about 100 hectares of cereals. The operation has gradually invested in high-performance and innovative equipment for orchard management. Today, with the takeover of the farm by Clément TOUZOU LI, a specialist in precision farming, the family farm will continue to invest in precision farming and new technologies. The farm is used, for example, as a test and showcase area for "in-house" software for processing and analysing Sentinel satellite data for irrigation management and as a decision support tool for other interventions.</p>	

## B - POST-HARVEST PROCESSING UNITS & OTHERS

### CHAPTER B0: General information

ID.	Requisite	Data
B01	Contact person (name, email)	Clément Touzouli
B02	Unit name	EARL de Roquedor
B03	Address and Country	La Bourdette 32380 PESSOULENS
B04	Experience in demonstration activities (years)	1 year
B05	Kind of units	Farm/ Cooperative

### CHAPTER B1: Structure of the unit

ID.	Requisite	Data
B11	Physical description of the unit (location, geographical data, etc...)	
	Products are stored and sold by the farm	

## CHAPTER B2: Data about products/services

Requisite		Data
Description of products, semi-products, service or any output of your process		
B2I Product	Experimental Industry	
	Organic origin (unit)	ICM Origin (unit)
Product 1	Walnut	Walnut with shells, kernels, and walnut processed food
Product 2	Soybeen for human consumption	SOJASUN
Product 3	Cereal for cooperative	
Product 4	Service Optimization Solution for cooperative using Sentinel 2 and sentinel 1 data	
Total (ha)		



### CHAPTER B3: Description of processing and “technological” equipments

ID.	Requisite	Data
B31	<p>Physical description of the unit (location, geographical data, etc...) (specify)</p> <p>Processing equipment:</p> <ul style="list-style-type: none"> <li>- For cereal Cleaners Separators (shneider Jacquet)</li> </ul> <p>Storage and ventilation (DENIS)</p> <ul style="list-style-type: none"> <li>- For Walnuts: destoner, washing unit, optical sorter (protech), drying unit (ROUSSET)</li> <li>- For Satellite services : storage and calculation servers</li> </ul>	
B32	<p>Equipment to apply new technologies in the process unit (specify):</p> <ul style="list-style-type: none"> <li>- GPS Johndeere Starfire</li> <li>- Remote controlled irrigation system by Variable speed drive Shneider electric ATV620</li> <li>- Electrical valve</li> <li>- Precision softwaresGPS sensors</li> <li>- Capacitives sensors and vacuum chamber</li> <li>- Mobile and fixed cameras</li> <li>- Whether station</li> </ul>	