



D1.3: A scalable, flexible and mutually profitable business model for RESERVIST Network operation

STAM



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 101016041

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Version:	1.0
Date of preparation:	21.02.2022
Dissemination Level:	CO

EXECUTIVE SUMMARY

A blueprint of the RESERVIST network, made of 3 different layers, was defined:

- A “Coordination and Monitoring Level” will monitor the health and emergency situations at global level, with the goal to detect them as early as possible and to use early cues for prediction and forecasting in situations where that is possible (eg epidemics).
- A “Decision Level” will act as an intermediate level between the market requests and the RESERVIST Cells, in both emergency and standby modes.
- The “Operational Level” corresponds to the RESERVIST Cells, consisting of the product manufacturing companies and the other organisations involved as service providers.

After this definition, the document proposes three different options for the RESERVIST Business Model, with an aim to maintain available the RESERVIST products and services after the end of the project. Two macro-schemas are described here, the former based on a prime contracting approach, the latter on a direct payment from the end-user to the manufacturer.

Each of the manufacturing partners was asked to fill in a capacity questionnaire to provide information on their respective products. The information gathered through this survey was used to define the business models.

In particular, as a result of this survey, a schema of “payment for preparedness” is proposed, involving an external organisation to share the financial risk linked to keeping in stock high amounts of products for a potentially long period.

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1. INTRODUCTION

1.1. Purpose of the Deliverable

The present Deliverable aims at defining different options for the future economic sustainability of the RESERVIST Cells and network. In particular, the document reports the activities done in Task 1.3 *RESERVIST Network business model and liability*, led by STAM from Month 6 (May 2021) to Month 15 (February 2022) of the project.

The Task aims at drafting a set of schemas for business models for the different RESERVIST products and services, to be adopted in both emergency and “standby” situations. The product and service providers will act after the end of the project in the RESERVIST Cells, and the business models proposed in Task 1.3 shall be beneficial and remunerative for each of them, according to the different roles they play and the work they do. Moreover, the business models that are identified here are based on a flexible and generalised approach, thus making them suitable to be replicated after the end of the project for other products that may be proposed to make part of RESERVIST value proposition. According to what is stated in the Description of Action, the proposed business models are based on the three main features required:

- Scalability: the business models have been thought for relatively small networks, based on 1-4 manufacturing companies and some service provider(s); however, the approach proposed can be applied even in case the RESERVIST community grows and the number of manufacturers and products increases;
- Flexibility: the products making part of the RESERVIST value proposition are very different from each other (textile-based products, disinfection equipment, ventilators, etc.). For this reason, the business model must be general enough to be adapted and customized to each of them, independently from the size of the companies, customers, emergency or “standby” situation, etc;
- Mutual profitability: each actor involved in the supply of products and services will be duly remunerated, thanks to the mechanisms proposed by the business model, according to their different roles.

1.2. Structure of the Deliverable

After this introductory section, the deliverable is composed by a Chapter dedicated to the overview of the project in terms of governance of the future RESERVIST network, and the rules and protocols that will be followed by the partners in the future of their work together after the end of the project. Aspects such as the use of the RDP and the data processing are taken into account. Section 3 is the core part of the document, containing the description and illustration of the proposed business models, with an explanation of the cashflow among the actors (end-users, customers, interfaces, service providers, product manufacturers, etc.) in the different conditions (e.g., payment for preparedness, emergency, standby, etc.). Section 4 drafts the conclusions and sets the next steps for the future work.

1.3. Task input and output

Task 1.3 is connected to several different activities in the project. First of all, it takes input from the definition of the RESERVIST network done in Task 1.1, together with the operational protocols between the different actors in Task 1.2. Moreover, the business model is also connected with the adoption of the RDP, whose requirements and developments are done in WP2. Referring to the output of this Task, the final result will be a set of business model options to be customised for each RESERVIST Cell (already being part of the project, and future RESERVIST Cells), according to its products and services defined as value proposition. Finally, the liaison and links to be set up in Task 7.4 can be adopted to find key stakeholders for the future sustainability of the RESERVIST network and business.

2. STARTING POINT AND METHODOLOGY

2.1. RESERVIST Blueprint

The RESERVIST network will be working as a cluster of different organizations (companies, RTOs, other clusters, associations, etc.), each of them cooperating to give the end-users of the RESERVIST products the best service and delivery in the quickest way, especially during the emergency situations. However, the network collaborative work must be fully operative in the “normal” or “stand-by” situation, too. This leads to the need of a structured network with well-defined operational protocols, especially for triggering the emergency mode.

Deliverable 1.1 already showed how this network should work thanks to a continuous sharing of distributors, transport agents and end-users, to create active relationships between partners from different cells and the other sub-networks, to upscale the delivery potentiality of each single organization, and reduce costs and timing. Moreover, the market demand should drive triggering of emergency situation, but something more accurate and more responsive can be done with the presence of a coordination level in the network. This is shown in Figure 1.

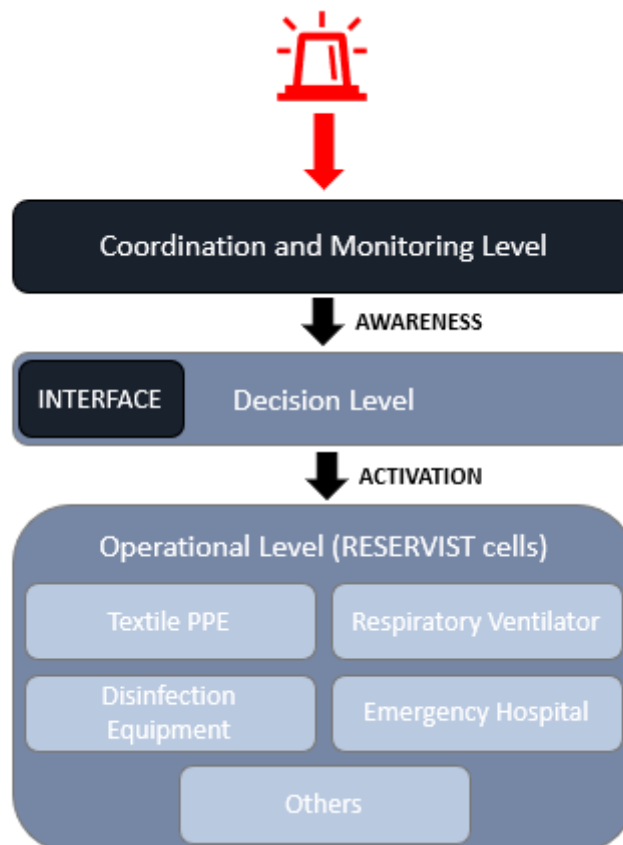


Figure 1: RESERVIST Network Structure

The Figure 1 shows all the different levels of the RESERVIST Network as they are thought to make the business models work in the future. A “Coordination and Monitoring Level” is appointed to monitor the health and emergency situations in general at global level, detecting

them in advance. To have this capability, this level must be represented, or at least supported, by political actors at European level, with strong connections with the National bodies that manage emergency situation (e.g., National Civil Protection bodies). When the Coordination and Monitoring Level detects the possibility of an emergency, it gives this information to the following level, the “Decision Level” of the network.

The “Decision Level” is the first one belonging to the inner boundaries of the RESERVIST consortium, consisting of the project partners. In particular, this level acts as the first interface between the market requests and the RESERVIST Cells. Here, a single entity will act as the prime contractor to sell products and guarantee the quickest delivery and promptness of the network. During Task 1.3, HOSPI was appointed in a preliminary way to cover this interface role. In case of an emergency, the interface will receive the warning from the Coordination and Monitoring Level and will take a decision on activating the lower level, the Operational one.

The “Operational Level” is basically composed by the RESERVIST Cells, consisting of the product manufacturing companies and all the other organisations involved as service providers. The Cells are composed by the different layers of the supply chain (raw materials, components, etc), and other stakeholders (product designers, partners working on the quick repurposing of production lines, quality and certification service providers, etc.). Moreover, it is important to underline the openness of the RESERVIST Network: the Operational Level will not only comprise the already existing Cells (the Cells set up in the course of the project), but also any other high-demand product will be able to be integrated and a new Cell within this level.

In the future, this network and structure will be formalized by an agreement, which will be signed by all the organisations willing to be involved in any of the different layers. Most probably, the economic sustainability of the network will be pursued by selling the products on large scale, without making the partners pay any membership fee.

2.2. Capacity Questionnaires

During Task 1.3, a benchmarking work was done by STAM as the task leader on the RESERVIST product manufacturers. The goal of this action was gaining a deep understanding of the current capacity to promptly respond to an emergency. Indeed, the aim of the future network is to give quick responses to the market in case other demand peaks are reached, for pandemics or other kinds of emergencies requesting these products.

The task leader prepared a simple questionnaire to collect data on some key aspects such as the availability of products in stock in normal situation, and the logistics for order processing and delivery. Moreover, the pricing policies were investigated by the partners, together with the need for a “payment for preparedness” schema for the manufacturers, to ensure the future promptness of response in case of emergency. Here follows the complete list of questions that were asked to the RESERVIST manufacturing companies.

- *DESCRIPTION OF THE PRODUCT*
 - *Name of the product*
 - *Location address*
 - *Description of the product*
 - *Picture*
 - *Essential information*
 - *Certifications and compliance to norms*

- *Properties*
- *Risks*
- **CAPACITY**
 - *Stock availability*
 - *Availability to keep items on stock for rapid supply*
 - *If yes, stock in home warehouse or need to find another location*
 - *Minimum and/or maximum quantity to keep in stock*
 - *Due date*
 - *Requested payment to keep products in stock (if any) (i.e., would you ask for a “payment for preparedness” in order to keep in stock some items? If yes, how much would you estimate)*
 - *Manufacturing availability*
 - *Cost for keeping capacity*
 - *Order requirements*
 - *Minimum quantity to be ordered*
 - *Maximum quantity to be ordered (within a certain time)*
 - *Other requirements*
 - *Estimated delivery time*
 - *Delivery time*
 - *Delivery time Ex Works (the goods are finished in the factory and ready to be transported)*
 - *Conditions that can affect the delivery time (e.g., geographical location of end-user, magnitude of the order, etc.)*
 - *Transportation*
 - *Transportation methodology (internal or external management, management in case of emergency, etc.)*
 - *Price*
 - *Price, price range*
 - *Contact information*

The questionnaires were filled in by HOSPI, S-TEC, NARDI, AMI3, IDO, DELT, SIOEN and NORMA, and their main outcomes are summarized as in Table 1.

Table 1: Capacity questionnaire results

Product	Availability in Stock	Timing	Order Policies	Other
Ventilators (Invasive and Non-Invasive)	3 pcs for each type in stock	5 days for delivery	1-5 pcs	Payment for preparedness needed to increase the stock
Reusable Facemasks	80 M pcs	24 h to ship	40 k – 1.5 M pcs / week	Payment for preparedness needed to keep the stock
Polypropylene medical masks	100 k pcs	To be defined	1,5 k – 1 M pcs / month	Larger stocks: costs to be evaluated
Disinfection Equipment	300 pcs	4 weeks for delivery	50 – 300 pcs	Payment for preparedness needed to keep the stock
Emergency Hospital	14 solutions	1 week without customisation	N/A	Payment for preparedness needed to guarantee the stock

At a glance, the main observation is the generally low capacity in stock, except for the masks. The preparedness to a future emergency needs to be supported by a business model helping companies to enlarge or guarantee the availability of the stock. For this reason, all the manufacturing companies expressed their need of getting a “pay for preparedness” schema, that would lower the risk of having a high number of not sold items after production. This schema will be analysed further in the Business Models. The Capacity Questionnaires represented the starting point to investigate the benchmark and needs of manufacturing companies to be compliant with RESERVIST general goals in the future and paved the way to propose different approaches to mutually profitable Business Models in Section 3.

3. BUSINESS MODELS

This Section is dedicated to the definition of five different Business Models. All of them take in different measures the features specified by the goals of Task 1.3 (mutual profitability, scalability, flexibility), and have different levels of benefits and drawbacks. The methodology followed during Task 1.3 was based on sketching first a high number of different models, and then shortlisting them after a deep analysis phase internally and together with external stakeholders. The next paragraphs describe the models and financial flows in the different cases.

3.1 Case 1 – Intermediate Prime Contractor

The first Business Model is based on the presence of a prime contractor partner internally to the RESERVIST consortium. Since many of the products in the portfolio could conceptually be installed in an emergency hospital, HOSPI is the preferred partner to play this role after the end of the project. In this case, this partner (the so-called “INTERFACE”) works as both a customer attractor, thanks to its commercial network, and a prime contractor. The customer is, in Case 1, the end-user, that directly closes agreements with the INTERFACE. The coordination and monitoring level of the RESERVIST network is not supervised but is autonomous, directly managed by project partners, having the task to monitor continuously the global situation, in terms of emergency raising and demand peaks, to activate the Cells. As far as the financial flow is concerned, the INTERFACE gets paid by the end-user and in turns pays the RESERVIST partner(s) engaged with a subcontracting schema, to be regulated in the future by a “Business Agreement” to be signed between the RESERVIST network partners. The business of the INTERFACE is based on retaining a percentage as prime contractor; this percentage will be defined in the “Business Agreement” and will depend on the volume of the contract.

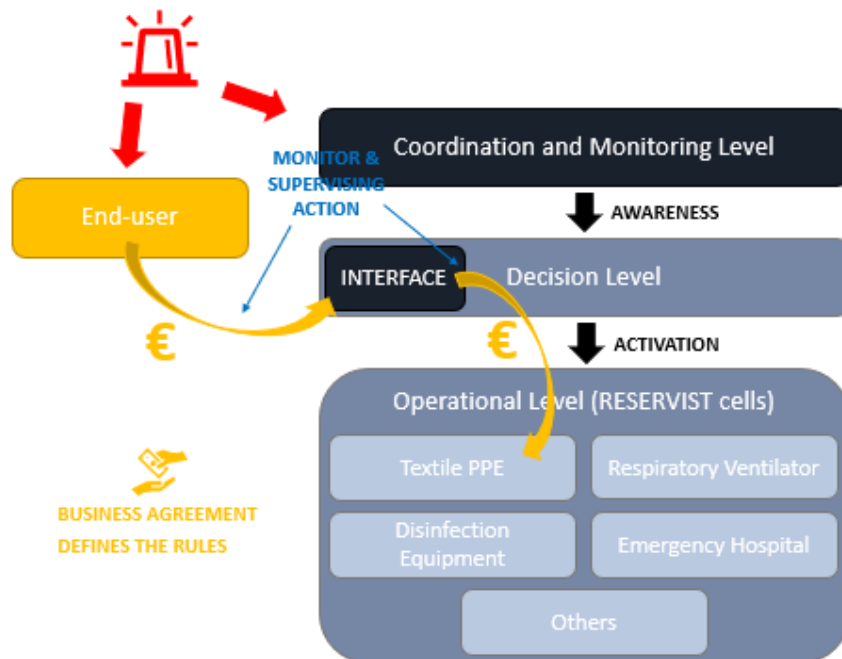


Figure 2: Case 1 - Intermediate Prime Contractor

Pros: only 1 actor to be dealt with for the customer, simple operations. INTERFACE can act as an orchestrator to manage complex requests by the customers and increasing its own added value (and turnover).

Cons: no high-level monitoring of emergency situations; liability on the INTERFACE. No “payment for preparedness” implemented.

3.2 Case 2 – Interface as a selling agent

The second Business Model puts in direct contact the customer with the RESERVIST Cells. The customer is still the end-user of the products, and the RESERVIST Cell triggering mechanism is the same as in Case 1. A company (e.g., HOSPI) is still the INTERFACE, with the role of attracting customers and doing commercial activity for the network. In this case, the customer directly closes agreements with the product providers in the Operational Level, after the INTERFACE has done a pre-commercial offer as a first filter. Also in this case, the coordination and monitoring level is autonomous, and does a monitoring action on the financial flows and Business Agreement rules compliance. In this case, the INTERFACE gets paid for its commercial work by the RESERVIST product provider who was contracted by the customer. Again, the amount paid to the INTERFACE will be defined in the “Business Agreement” and will depend on the volume of the contract.

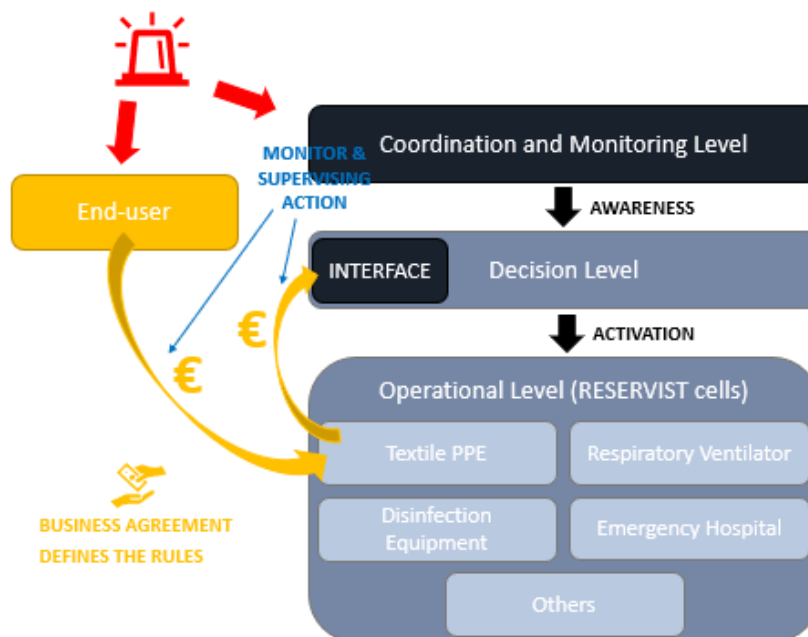


Figure 3: Case 2 - Interface as a selling agent

Pros: contracts closed by the expert of the single product. Direct relationship between the customer and the manufacturer. Liability on who really does the delivery.

Cons: suitable only for very simple contracts with only 1 provider engaged; for complex ones, it is hard to manage. No high-level monitoring of emergency situations. No “payment for preparedness” implemented.

3.3 Case 3 – Supervised Mode

In this case, an external authority is introduced, with the role of providing support to the RESERVIST network. In particular, this external stakeholder (or community of stakeholders) can be involved to integrate the “payment for preparedness” schema into the Business Model.

3.3.1 Supervised Standby Mode

Here, an external entity (eg one or more public authorities) pays the INTERFACE for the preparedness of the network, and the INTERFACE acts as a prime contractor, like in Case 1. Within this schema, each RESERVIST manufacturer receives a payment for preparedness from the INTERFACE, that will retain the amount necessary to cover the maintenance costs of the RDP as the main digital infrastructure of the ecosystem. This works, while a “normal” situation is detected by the external authority, without emergency.

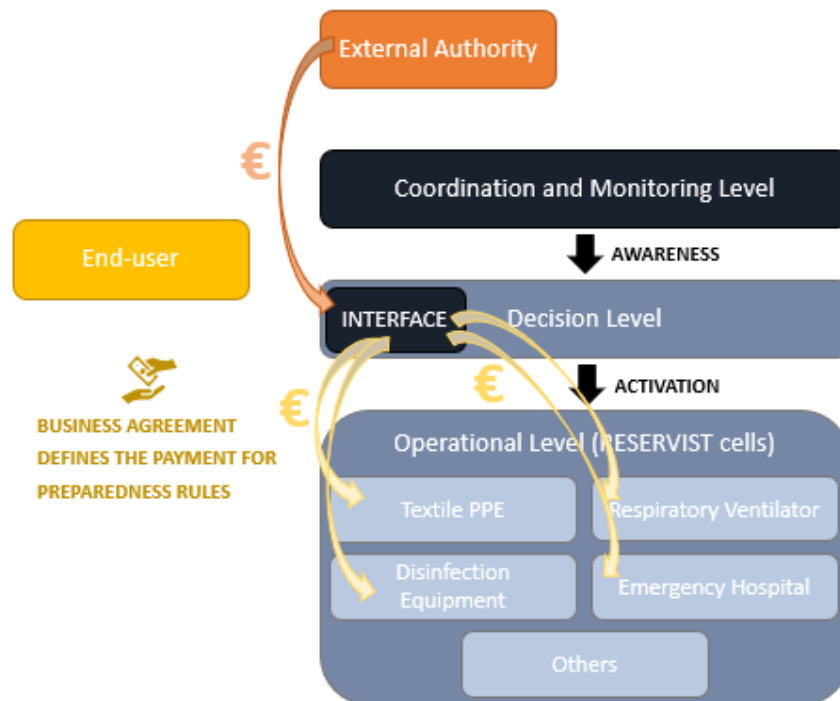


Figure 4: Case 3 – Supervised Standby Mode

3.3.2 Supervised Subcontractor

When an emergency situation arises, it is monitored together with the market demand for emergency-related products by the external authority and by the market itself (the “end-user” in the schema in Figure 5). Now, the INTERFACE acts as a prime contractor for two different flows of money: i) the payment for the delivery of products, coming from the end-users, and ii) the payment for preparedness to keep the stock availability as high as possible for the future demand peaks, to avoid any downtime of the supply chain in case the demand peak lasts for a long period. Like in Case 1, the Operational Level will be paid by subcontracts done with the INTERFACE, regulated by the “Business Agreement”.

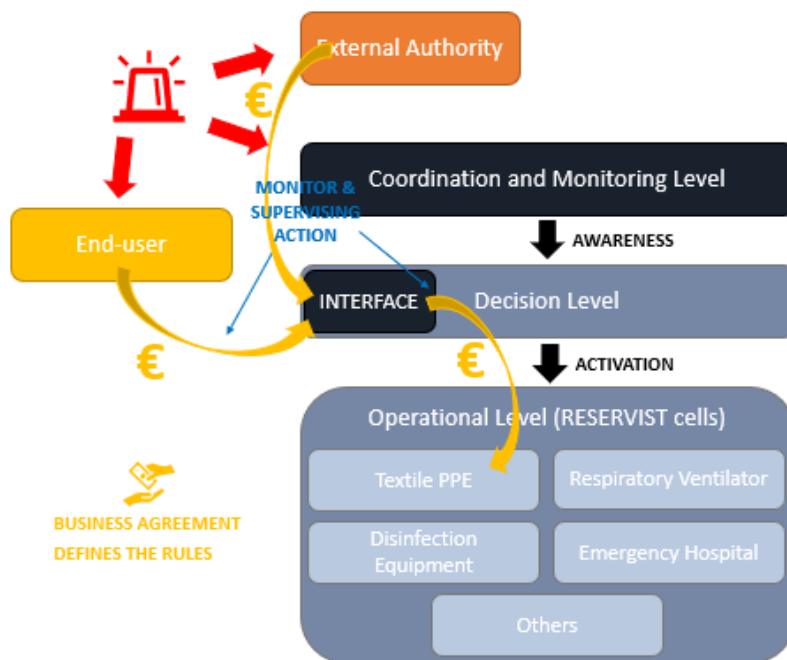


Figure 5: Case 4 - Supervised Subcontractor

3.3.3 Supervised Direct Payment

The emergency situation monitoring and mode changing triggering are the same as in the previous case. The prime contractor is not foreseen in this schema, but the first receiver of the money is the manufacturer at the Operational Level. The INTERFACE is a market agent like in Case 2, and the manufacturers get directly paid by the External Authority for preparedness. At the same time, while selling products to the end-users, they get paid for them, and the INTERFACE receives a percentage of the total volume of the contract for its selling work.

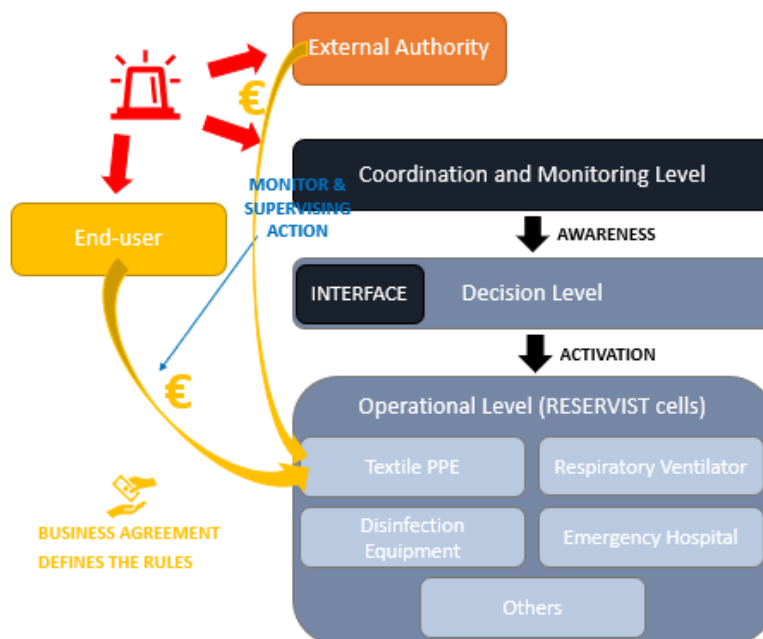


Figure 6: Case 5 - Supervised Direct Payment

4. CONCLUSIONS

Task 1.3 was dedicated to the definition of different options for RESERVIST Business Models. Two main macro-schemas were identified, the former based on a prime contracting approach, the latter on a direct payment from the end-user to the manufacturer, with a lighter involvement of the network manager or “INTERFACE”.

In both cases, the manufacturing partners expressed the need to minimize or share the risk of ensuring that the product availability will be guaranteed for future emergencies. For this reason, a schema of “payment for preparedness” was hypothesized, involving a third party not belonging to the group of end-users, to define an agreement with the RESERVIST partners and support the cells to keep working after the end of the project.

The task is quite streamlined with other activities within the project. In particular, in Task 7.4 on liaison the partners are going to keep on the research for one or more external entities able to give this kind of support. This is the case of some EC agencies and National Contact Points for Civil Protection. Further, in Task 7.3 we want to integrate outcome of this deliverable into the training materials.

ANNEX A

In this Annex, all the Capacity Questionnaires (CQ) filled in by the manufacturing partners are reported.

CQ1 - Ventilators

Description of the PRODUCT

The scope of this template is to collect all the useful information about the products that the RESERVIST Group will offer to a potential end-user. It is important to clearly state the capacity that each partner is capable to offer.

General information

Name of the product

Mechanical ventilators: Invasive and MultiConPAP systems.

Location address

Parque Tecnológico de Asturias, parcela 34, 33428 Llanera, Asturias, SPAIN

Description of the product

Mechanical ventilation (MV) is a therapeutic strategy, widely used in routine clinical practice, which consists of replacing or assisting in varying degrees spontaneous pulmonary ventilation when it becomes insufficient. Mechanical ventilation provides an artificial external support to the patient's breathing, mobilizing gas within the lungs, thus ensuring proper oxygenation of tissues, and preventing carbon dioxide retention. It should be noted that MV is a supportive (non-therapeutic) procedure that temporarily replaces normal respiratory function in those patients in whom this function is or may be compromised. On the other hand, MV can cause secondary lung damage depending on the patient's disease and the ventilatory strategy used.

In daily clinical practice, mechanical ventilation is used to provide respiratory support in a wide range of both respiratory and non-respiratory pathology. The main objective of ventilatory support is to maintain a gaseous exchange that is not necessarily normal but adequate to the patient's metabolic demand. This exchange should be achieved with minimal lung damage and the least possible degree of hemodynamic alteration.

Invasive Mechanical Ventilator:

invasive positive pressure mechanical ventilation system design for COVID-19 patients requiring intensive care. Based on common industrial components, the mechanical ventilator can be quickly manufactured even in situations of stock shortage. Its modular design also allows a quick change of the parts in contact with the patient in order to quickly reuse the equipment between patients. It includes a graphic interface capable of representing patient pressure and flow in real time allowing also a tactile interaction with the operator. Several ventilation modes can be selected with a wide configuration of the treatment parameters, as well as calibration modes.

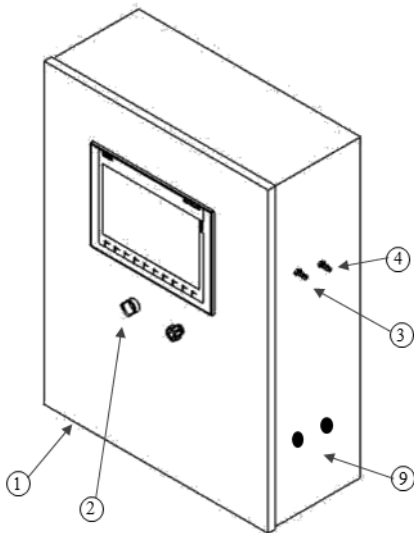
MultiConPAP non-invasive Mechanical Ventilator:

Air supply system for non-invasive ventilation by means of continuous positive air pressure supply. The MultiConPAP consists of two parts: the core, where the fan and the control system

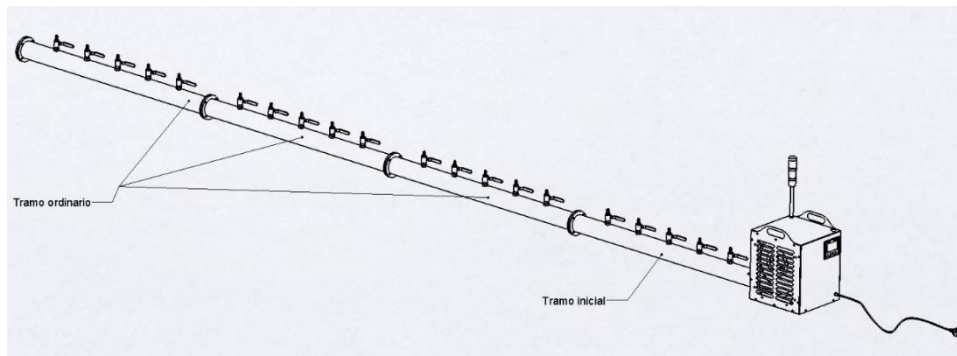
are housed, and the air intake distribution pipe. This design permits a continuous ventilation for several people at the same time

Picture

Invasive Mechanical Ventilator:



MultiConPAP non-invasive Mechanical Ventilator



Essential information

Invasive Mechanical Ventilator

- *Certifications and compliance to norms:* certified only for use in case on an emergency. Certification may vary depending on the established emergency.
- *Properties:* standard plug 220V, 2 medical gas entries available (Air, O2). Useful also in case only Air is connected. Stock of applicable parts is needed for each patient.
- *Risks:* Exclusive use by healthcare personnel prepared to perform intubation of patients.
- *Etc.*

MultiConPAP non-invasive Mechanical Ventilator

- *Certifications and compliance to norms:* certified only for use in case on an emergency. Certification may vary depending on the established emergency.
- *Properties:* standard plug 220V. Stock of applicable parts is needed for each patient.
- *Risks:* Exclusive use by healthcare personnel.
- *Etc.*

CAPACITY

Stock availability

- *3 units of each type will be kept in stock for immediate supply*
- *Units in stock can be shipped within 48 hours of order.*
- *To increase stock, payment of the cost of the components will be required.*

Manufacturing availability

- *No charges are requested for the maintenance of production capacity for the next 2 years.*

Order requirements

- *Minimum quantity to be ordered: 1 unit*
- *Maximum quantity to be ordered: 5 units*
- *Other requirements:*
 - o *Model: invasive or non-invasive*
 - o *Type of medical gas connection*
 - o *In non-invasive, number of pipes per equipment.*

Estimated delivery time

- *Delivery time: 5 days*
- *Delivery time Ex Works (the goods are finished in the factory and ready to be transported): 1 day*
- *Conditions that can affect the delivery time (e.g., geographical location of end-user, magnitude of the order, etc.)*
 - o *Geographical location of end-user*
 - o *Number of orders open at the same time*
 - o

Transportation

- *Transportation methodology (internal or external management, management in case of emergency, etc.): external management (transport companies)*

Price

- *Price range:*
 - o *Invasive Ventilator: 6.200 – 7.500 €*
 - o *Non Invasive Ventilator – 3.200 – 5.500€*
- *Contact information:*
 - o *Normagrup Technology S.A.*
 - o *Phone: +34 985 267 100*
 - o *normagrup@normagrup.com*

CQ2 – Reusable Facemasks

Description of the PRODUCT

The scope of this template is to collect all the useful information about the products that the RESERVIST Group will offer to a potential end-user. It is important to clearly state the capacity that each partner is capable to offer.

General information

Name of the product

Reusable facemask

Location address

Rue du Berlaimont 21A 6220 Fleurus / Belgium

Description of the product

Surgical reusable facemask 2 ply with earloops

Picture

To be provided once manufacturing is up and running / test

Essential information

- *Certifications and compliance to norms: test info CENTEXBEL / SIOEN*
- *Properties: test info CENTEXBEL / SIOEN*
- *Risks / no risks*

CAPACITY

Stock availability

- *Availability to keep items on stock for rapid supply
2.000 pallets space = 80.000.000 masks can be stored*
- *If yes, stock in home warehouse or need to find another location
In home warehouse*
- *Minimum and/or maximum quantity to keep in stock
Min 40.000
Max 80.000.000*
- *Due date
5 years*
- *Requested payment to keep products in stock (if any) (i.e., would you ask for a “payment for preparedness” in order to keep in stock some items? If yes, how much would you estimate)*

To be determined. Deltrian operates in a make to order (MTO) configuration. This implies that we need a purchase order to manufacture goods. On top of the material, we need to consider payment for stock keeping (logistic costs).

Together we need to define how both of these cost drivers will be paid with a clear timeline.

Manufacturing availability

Today we have 1,5Mio on 5 working days with 3 shifts

- > 300k per day on 4 lines
- > 75k per line per day (3 shifts)
- > 25k per shift per line

- *Cost for keeping capacity*

To be determined together.

Cost of having organization ready to start immediately.

Cost for keeping minimum 2 weeks of raw material on stock. This equals raw material for 3M masks. Logistical cost and material cost.

Order requirements

- *Minimum quantity to be ordered: 40.000pcs (= pallet quantity)*
- *Maximum quantity to be ordered (within a certain time): production capacity 1.5M / week*
- *Other requirements*

Estimated delivery time

- *Delivery time*
Stock can be available for pickup within 24h,
production see capacity
- *Delivery time Ex Works (the goods are finished in the factory and ready to be transported): Stock can be available for pickup within 24h*
- *Conditions that can affect the delivery time (e.g., geographical location of end-user, magnitude of the order, etc.)*

Transport to customer from Belgium depending on distance.

Raw material availability fluctuates strong since the pandemic.

Holiday season (end of year, summer vacation) can effect supply chains.

Price

- *Price, price range*
To be calculated: cost of raw material Sioen, throughput time after test at Deltrian.

- *Contact information*
Deltrian protective equipment.

CQ3 – Disinfection Equipment

Description of the PRODUCT

The scope of this template is to collect all the useful information about the products that the RESERVIST Group will offer to a potential end-user. It is important to clearly state the capacity that each partner is capable to offer.

General information

1.1. Name of the product

SANY+AIR

1.2. Location address

NARDI COMPRESSORI SRL – VIA M. POLO, 2 – 36075 MONTECCHIO MAGGIORE (VI) - ITALY

1.3. Description of the product

SANY + AIR is a low-pressure oil-free compressor equipped with a 10 meters spiral tube and a pressure gun, that can spray sanitizing products with very little air, designed for disinfection and sanitization. Thanks to the dry nebulization of sanitizing liquids, it is possible to disinfect all types of environments and surfaces. This device can work continuously for many hours without any maintenance. This compressor is equipped with a single-phase electric motor: 230V/50Hz.

1.5. Essential information

- Certifications and compliance to norms – it's a CE certified product.
- Properties – It can work continuously for many hours without any maintenance, it's a handy and an easy-to-use device and guarantee a reduction in the disinfectant products waste.
- Risks – no risks revealed.
- Etc.

2. CAPACITY

2.1. Stock availability

- Availability to keep items on stock for rapid supply – yes.
- If yes, stock in home warehouse or need to find another location – stock in home warehouse.
- Minimum and/or maximum quantity to keep in stock – min. 50 units – maximum 300 units.
- Due date – 4 weeks from request.
- Requested payment to keep products in stock (if any) (i.e., would you ask for a “payment for preparedness” in order to keep in stock some items? If yes, how much would you estimate) – 30% of the whole value.

2.2. Order requirements

- Minimum quantity to be ordered – min. 50 units.
- Maximum quantity to be ordered (within a certain time) – max. 300units per unique delivery.
- Other requirements

2.3. Estimated delivery time

- Delivery time – 4 weeks from request.
- Conditions that can affect the delivery time (e.g., geographical location of end-user, magnitude of the order, etc.) – geographical location of the end-user and in case the customer require a not standard version. Our standard version is supplied with single-phase engine 230V/50Hz, for different voltages, we are not able to guarantee 4 weeks for the delivery.

2.4. Price

- Price – 190,00 euros NET PRICE / unit. Transport and package costs are NOT included.
- Contact information:

NARDI COMPRESSORI SRL Via Marco Polo, 2 36075 Montecchio Maggiore (VI) ITALY Tel
+39.0444.159114 - Fax +39.0444.159122 – Mob +39.3454372141
www.nardicompressori.com

Email: info@nardicompressori.com

CQ4 – Face Masks of alternative materials

General information

Name of the product

Screenotec Type II or IIR medical face mask made from alternative material, to be later named officially.

If there is interest, we can offer our standard-material type IIR medical face mask as a different product. That product is already in production as certified and CE-marked EN 14683:2019 + AC:2019 Type IIR medical face mask.

Location address

Screenotec Oy

Konekuja 2

90620 Oulu

Finland

Description of the product

Screenotec Medical Face Mask (type II, non sterile), product name is intended for single use by healthcare professionals to protect both patients and healthcare professionals. The purpose of the medical face mask is to protect the user from airborne particles and the patient from particles entrained by the user's breath. The product is neither a respirator nor personal protective equipment.

Screenotec Medical Face Mask (type II, non sterile), product name is also intended for single use by patients and other lay users to reduce the risk of spread of infections.

The product in Reservist-project scope is made of alternative materials available in Finland, where standard meltblown-type filtering material is replaced with spunbond fabric. Raw material in both materials is polypropylene, but the manufacturing process and fabric structure differs a lot.

Picture



Medical face mask samples made from spunbond polypropylene.

Essential information

Alternative material Reservist-product is under development and testing, official testing and certification not finished

certification to be done: EN14683:2019 + AC:2019 Type II (possibly Type IIR)

CAPACITY

Stock availability

- Availability to keep items on stock for rapid supply
 - o not preferred, but possibility for small amount max 100 000pcs, larger than 100 000 pcs needs another location for stock
- Cost of keeping larger stock available needs to be defined. If there is a need for known amount of stock, we can offer cost estimation as option

Manufacturing availability

- Cost for keeping capacity: we can offer keeping capacity available as a service, but cost needs to be defined.
- Capacity currently available: up to 1M face masks/month for standard product, estimated 500 000 alternative material face masks/month

Order requirements

- Minimum quantity to be ordered 1500 pcs
- Maximum quantity to be ordered (within a certain time) 1 000 000 pcs – to be delivered within a time period
-

Estimated delivery time

- Currently unavailable, alternative material product needs to be finished, tested and certified before official production and delivery is available

Price

- Price, price range
 - o for alternative material product we can estimate production cost but the cost of material from Finnish provider Suominen is not known at this point
 - o Delivery cost depends a lot on customer location

Delivery package

- Face masks packed in a 50pcs cardboard box
- Smallest delivery package is 600x400x350 mm cardboard box with 1500 face masks
- EUR-pallet, size 800mm x 1200mm with 1800mm height includes 30 000 face masks
- Contact information:

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CQ5 – Emergency Hospital

General information

Name of the product

Hospitainer is supplier of rapid deployable hospitals, field hospitals and emergency hospitals. Due to stock and a modular approach, we can assemble all kind of configurations, depending on the needs.

Location address

Griftsemolenweg 19-21
8171 NS Vaassen
The Netherlands

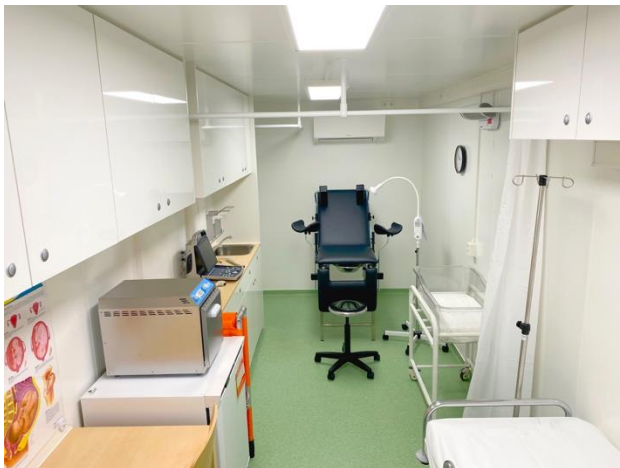
Description of the product

Due to the high variety of solutions, it is hard to sketch a complete picture. However, a first try:

Our products consist of:

1. Medical grade finished containers, including insulated and coated walls and floors, electricity, water and air treatment.
2. Tents
3. Medical equipment for all kind of services, including: OT, ICU, wards, dental, x-ray, pharmacy, primary health care, maternity, laboratory, sterilisation, ...
4. Medical consumables
5. Medicines
6. Infrastructure like generators, water treatment systems, bladders
7. Trucks, trailers etc for mobile solutions

Picture



A medical finished and furniture container from inside. For website purposes, we might choose to offer some additional pictures.

Essential information

- *Upon request*

CAPACITY

Stock availability

- *Availability to keep items on stock for rapid supply*
 - o *Always stock available.*
- *If yes, stock in home warehouse or need to find another location*
 - o *Main part of stock in our own warehouse.*
- *Minimum and/or maximum quantity to keep in stock*
 - o *Goal:*
 - *4 surgical solutions*
 - *4 maternal care solutions*
 - *4 primary health care solution*
 - *2 integral hospitals – 50 bed, including all supporting functions.*

Due to orders, stock might be temporarily less.

- *Due date*
 - o *Especially on medicines, due dates apply. We stock these at our medicine supplier, who is rotating stock to guarantee a shelf life of at least 1 year after delivery to us.*
- *Requested payment to keep products in stock (if any) (i.e., would you ask for a “payment for preparedness” in order to keep in stock some items? If yes, how much would you estimate)*
 - o *We always have stock. If we need to guarantee availability, we will charge a fee for preparedness.*

Manufacturing availability

- *Since this is our core business, we don’t charge anything to have manufacturing capacity. However, in an emergency, we cannot help everybody at the same time. For payment, we can make promises about priorities/ first chance of ordering.*

Order requirements

- *Minimum quantity to be ordered: Not applicable.*
- *Maximum quantity to be ordered (within a certain time): Stock can be delivered quickly, afterwards delivery times will increase due to production time.*
- *Other requirements: no specific in mind.*

Estimated delivery time

- *Delivery time:*
- *Delivery time Ex Works (the goods are finished in the factory and ready to be transported): if on stock: standard 1 week. If needed, it can be done quicker (1 day is achieved in the past) or longer, depending on exact configuration. If customizations are needed or stock is gone, delivery time can increase.*
- *Conditions that can affect the delivery time (e.g., geographical location of end-user, magnitude of the order, etc.)*

- *We can offer transport. Standard we offer CIF harbor, but other conditions are possible as well. For sea transport, transit time is mostly a few weeks. For air transport, transit time can be 1 to a few days. This is depending on volume of delivery.*

Transportation

- *Transportation methodology (internal or external management, management in case of emergency, etc.)*
 - *We outsource transport with fixed partners, so paperwork is aligned an minimal hick-ups are foreseen. We have experience with worldwide transport, including road, sea and air transport.*

Price

- *Price, price range:*
 - *This is completely dependent on the requested solution: amount of containers and tents, content, delivery terms etc.*
- *Contact information*

Our standard contact details are:

Mail: info@hospitainer.com

Phone: +31 555 5191713

Website: www.hospitainer.com