



AUSTRIAN WPIU OPERATING STRATEGY

1. THE LIFE WOLFALPS EU PROJECT

Livestock protection, the protection of grazing animals against attacks by large carnivores, functions as a bundle of measures in different areas of land use. In the agricultural sector, in addition to preventive technical measures (emphasis on fence construction), adjustments in pasture management and indoor livestock management, support services are also required after damage has occurred.

In this context, this includes the already established institution of the damage assessment of the nine federal state administrations and as a new concept the creation of so-called wolf prevention emergency teams. The formation of these teams is a central point in the work program of the international LIFE - project WolfAlpsEU (duration 2019 to 2024), in the context of which high-quality expertise from all over Central Europe can be drawn upon.

Experience has shown that a problem in the acceptance of large carnivores is often the perceived helplessness of those affected, in addition to the emotional burden of animal loss and thus fear for their own livelihood. The emergency teams described here can also be a sign that help is available, in addition to relieving the burden of the necessary measures around a damage event.

The LIFE Project WolfAlpsEU builds on the WolfAlps project, which was successfully completed between 2013 and 2018 and dealt with measures on wolves in the Italian and Slovenian Alps. The most important result was the establishment of a network of different institutions for coordinated measures and management. These long-term measures are mainly aimed at reducing the impact on pasture management through the implementation of prevention measures and awareness raising. The current WolfAlpsEU project targets the entire Alpine arc and aims to follow up on the measures from the first project. The institutional fragmentation for the management of large carnivores in the Alpine region has been identified as an additional major challenge.

The LIFE WolfAlpsEU project aims to develop, disseminate and implement model measures. Cross-border cooperation is of utmost importance for coexistence, as measures can only be implemented meaningfully if they are applied at population level. Such showcase measures include the development of operational scenarios, operational planning and the mediation of the emergency teams mentioned above. In the context of the project, these are called "WPIU - First-Aid Wolf Prevention Intervention Units". All measures and activities in the project are derived from previously identified problem areas.

The following points are relevant in connection with the emergency teams dealt with here:

- Fragmentation of competences and responsibilities in administration and management
- Conflicts with agriculture (pasture management) and hunting
- Social conflicts

Within the framework of the LIFE WolfAlpsEU project, the HBLFA Raumberg-Gumpenstein as a partner in the project, in cooperation with the Austria Center Bear, Wolf, Lynx, will set up these emergency teams, train them and accompany them during the first operations. The strategy paper presented here was prepared jointly by the HBLFA Raumberg-Gumpenstein and the Austria Center Bear, Wolf, Lynx within the framework of the EU LIFE Project WolfAlpsEU. This national strategy is based on a framework document jointly prepared by the project partners at project level.

This strategy describes the basics, the tasks, the required know-how of the team members, their training and the organizational framework for their work in Austria. The long-term coordination of the teams is to be carried out by the Austria Center Bear, Wolf, Lynx.

Details of the WolfAlpsEU project: <http://www.lifewolfalps.eu/>

2. TASKS, ORGANIZATION

2.1 Goals and tasks of a Wolf Prevention Intervention Units

A Wolf Prevention Intervention Unit has the task to help the affected keepers and herdsmen in case of a damage quickly, unbureaucratically, with appropriate high-quality knowledge and also equipment, as well as to simplify the damage completion. For this purpose, it must arrive as quickly as possible after an appropriate alarm has been raised, assess the situation from the point of view of livestock protection, secure the location of the killed animals and, if necessary, coordinate further emergency measures, if possible also for neighboring grazing areas (intervention at a preventive level). This may also include initial simple scaring measures. Concrete measures include, among others, the erection of livestock protection fences, the rounding up of scattered animals, or help in case of a possible premature departure. It brings along necessary material and special equipment and the necessary expertise.

After the immediate initial measures, the emergency team is to support the affected livestock farmers as far as possible in the further processing of the damage (compensation payments) and, above all, to establish a link to a prevention consultation (by the Chamber of Agriculture or interest groups).

All in all, such an emergency team minimizes damage that has already occurred and prevents consequential damage. These teams form the bridge between the damage inspector and the prevention advice.

2.2 Organization

Areas of Responsibility

The activities and operational areas of the Wolf Prevention Intervention Units are to be determined in coordination with already established procedures and processes. The emergency teams are by no means in competition with the official damage inspection by official experts but can bring relief as a supplement in the field of damage mitigation. Corresponding interfaces and arrangements are to be provided and supervised throughout Austria. However, the damage inspector has the central role in case a team is requested via the Austria Center, as he will usually be the first on site with the necessary expertise. These points must be considered in the training and further education of the damage inspectors, which is organized by the Austria Center Bear, Wolf, Lynx since 2019. The competence for the management of large carnivores in general and thus for damage inspection (with possible compensation) lies exclusively with the individual regional authorities.

How the damage inspection is handled in detail differs between the nine individual federal states. Contact persons for the emergency teams at the individual federal state administrations are therefore necessary.

The emergency teams need a central support organization: HBLFA Raumberg-Gumpenstein, as a partner in the project, is responsible for the installation, training and management of the first operations during the project, in accordance with the project application. In this first phase, during the duration of the WolfAlpsEU project, three teams are planned under the joint coordination of the Austria Center Bear, Wolf, Lynx and HBLFA Raumberg-Gumpenstein (see Section 2.2.3). The project duration (until 2024) must be used to ensure the long-term availability (including financing) of the teams. Ideally, it would also be desirable to set up additional teams.

In the long term, after the end of the WolfAlpsEU project, a central coordination office equipped with the appropriate competencies is necessary for the operation, coordination and further training of the teams. The Austria Center Bear, Wolf, Lynx is suitable for this long-term sponsorship, since all provincial administrations and the federal agencies concerned are represented here. When the Austria Center takes over the sponsorship, the financing will then have to be secured. According to current considerations, this will include at least parts of the equipment, but above all the costs of the possible missions, since these should not have to be borne by the farmer concerned, as is the case with the costs of a damage assessment. For the equipment of the teams, for example, existing so-called "emergency kits", which are available in some federal states, could be used.

Financing possibilities could be direct financial means of the federal states, which, depending on the framework conditions, could also come from "Rural Development" via RDP funds of the EU. The Austria Center can act as project management agency in this case. For a broad acceptance, however, administrative efforts for the farmers should be avoided. Ideally, the costs should be settled directly between the participating agencies without any additional application or involvement of the farmer.

Recruitment, Resourcing

According to the requirements of a Wolf Prevention Intervention Units, it makes sense to recruit potential members directly from the agricultural environment. A cooperation with a machinery syndicate, originally founded as a self-help association and now organized as a service company, is a possible solution. Further opportunities are offered by the Chamber of Agriculture with its connections as a representation of the interests of the agricultural sector; here, synergies in the area of consulting are also possible. In various regions, there are also farmers who deal independently with questions of livestock protection and could also pass on their acquired expertise here.

Distribution of Wolf Prevention Intervention Units in Austria

Each emergency team is assigned its own area of responsibility. In a first phase, which corresponds to the project duration of the EU project mentioned above, three teams will be set up for Austria. A first spatial division can be seen on the map in figure 1. An increase in the number of teams is desirable (2023 to 2028) through a planned inclusion of the machinery syndicate and use of the membership structure of the Austria Center.

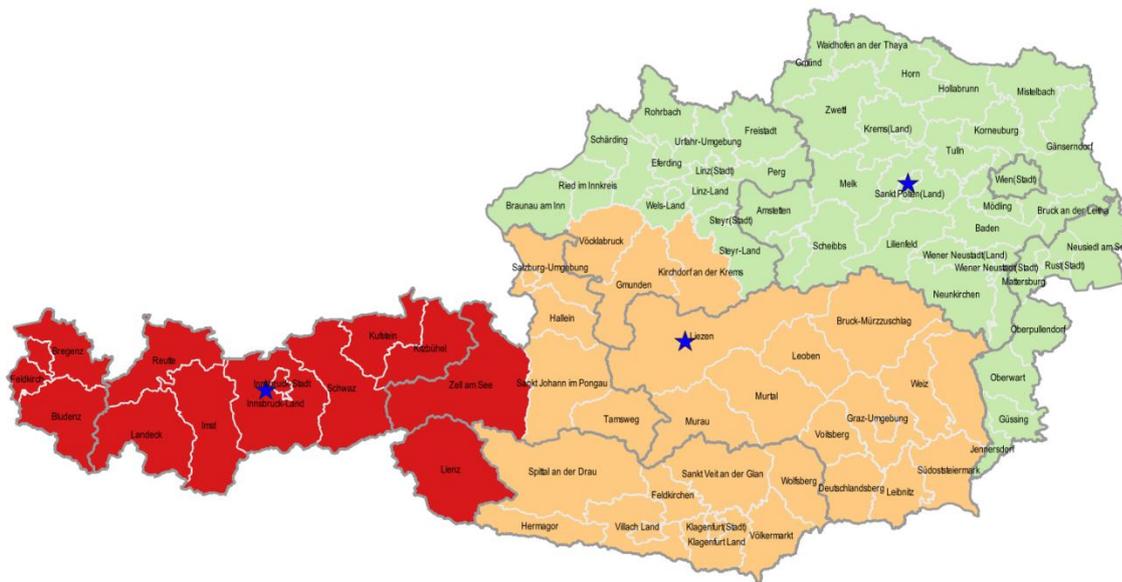


Figure 1: Planned areas of operation of the emergency teams in the first phase of the WolfAlpsEU project. In the border areas, a neighboring team can also be deployed, depending on the current situation. This will be decided in consultation with the Austrian Center Bear, Wolf, Lynx in case of an alarm.

3. TEAM STRUCTURE AND EQUIPMENT

A team normally consists of four members, all of whom should have an agricultural background and complete a special training program. Whether or not all four members will be deployed, depends on the individual incident and is the responsibility of the team leader.

All procedures and equipment must be documented using checklists, each of which should be available to all parties involved. Part of these checklists are also all necessary contact information for the persons involved and must therefore be checked regularly, at least at annual evaluation meetings, and adjusted if necessary.

In any case, the equipment of an emergency team must include

- Fence material: 6 pasture nets, each 50m long and ideally 1.08m high
- or material for 500 running meters of stranded fence according to the recommendations for technical livestock protection of the Austria Center Bear, Wolf, Lynx; in addition, approx. 120 fence posts fiberglass, diameter 10mm with clamps; height 1.5m for possible reinforcement with flutter tape
- Supplementary for willow nets: at least 100 fence posts (fiberglass or plastic), length 1.5 m to raise and reinforce the willow nets
- Electric fence with solar panel, power 4 joules, with battery and solar screen
- 4 Foxlights - Flashing lamps
- Blue and white flutter tape, at least 500 running meters

- 2 clasps (back carrying)

By incorporating existing facilities, such as the machinery syndicate, further direct investments, e.g. for vehicles, can be minimized, as can the need for small tools.

Mobility should be guaranteed by an off-road vehicle (pickup), possibly with a trailer. Under certain circumstances, after consultation with the person responsible for the pasture, the use of a quad bike is also advisable. Already in the first stage of development with three teams, however, a differentiation in the equipment may make sense, because the "Team East" (see map) will have to deal with cattle and conventional grazing nets cannot be used here (see list above).

4. TRAINING AND KNOWLEDGE

4.1. General conditions, required qualifications

Requirement profile in the team

- Very good knowledge in the field of technical livestock protection and fence construction, especially in rough, steep terrain
- Experienced in handling grazing livestock, independent of the species (sheep, goat, cattle), knowledge of the needs (estimation of feed requirements)
- Good physical condition, sure-footed and experienced to work under bad conditions (weather, poor visibility)
- Resilient, able to work in a concentrated manner under stress (in a restless environment, under observation, time pressure, in the dark)
- Knowledge of the biology and behaviour of large carnivores
- Basic knowledge of DNA sampling, for possible assistance of a damage investigator
- Communication training (at least one team member, usually meaning the leader)

Interfaces, additions

Close cooperation in the training and further education of official damage investigator is necessary and an exchange with (institutional) agricultural advisory services (Chamber of Agriculture or by interest groups etc.) is recommended. Synergy effects can also be used in all these training and further education events of damage investigators, prevention advisors and team members of the emergency teams, which are run through the Austrian Centre Bear, Wolf, Lynx.

4.2. Training structure, training courses

In any case, it should be noted that with a team of four members, it will be necessary to train about six to maybe eight people in order to be able to carry out an operation at full strength with four team members at any time.

In order to make efficient use of resources and previous knowledge, the training can be divided into modules, whereby a team leader must complete all modules or provide proof of the required knowledge. However, not all members need the communication training or the know-how to take DNA samples. With

previous knowledge, e.g. due to his/her background, some parts/modules in the training can be skipped. This must be decided by the training institution and the potential team leader.

Every year, before the grazing season starts, all members of all WPIUs must meet to exchange experiences, evaluate the previous season (based on documentation of the actions performed) and refresh the training. It is important to bring all teams together (depending on the number) or to have a "coordination team" that attends all meetings with several WPIUs in order to gather all experiences and evaluations, to be able to evaluate the work and to check the standards applied in order to guarantee quality and uniformity at the state level.

The educational responsibility is incumbent on the HBLFA Raumberg-Gumpenstein in cooperation with the Austria Center Bear, Wolf, Lynx. The training content is developed jointly within the framework of the WolfAlpsEU project and is adapted over time on the basis of the documentation of assignments already completed and experience gained, if necessary.

4.3. Curriculum

Content of the Curriculum:

- Livestock protection and pasture management in practice
- Biology and behavior of the wolf, but also of other large carnivores (bear, gold-jackal)
- The team members should
 - know the basics of behavior, especially food acquisition;
 - be able to recognize and interpret traces of presence (tracks, organic traces...) and
 - be able to implement this knowledge in the context of pasture management
- Fence technology: models, possibilities, devices for electric fences
- Livestock protection fences in practice: devices, terrain, workload, construction of fences in difficult terrain
- Basic knowledge of DNA sampling: securing the site, initial documentation
- Communication training

Based on the project LIFE WolfAlpsEU as the carrier of the first set up of the emergency teams and the frequency of damages caused by wolves, the main focus of the content is clearly on this issue. However, since damage events caused by bears and, in the future, by gold jackals cannot be excluded, these animals will also be discussed.

The team members learn basic concepts of livestock and pasture management, advantages and disadvantages of different grazing methods and basics of feed supply for different grazing animals.

The team members will not only work with their own equipment, but also with material available on the individual mountain pastures. Therefore, **knowledge of equipment and fence systems** with accessories available on the market is necessary. This also includes a sound knowledge of various pasture fencing devices with accessories, especially solar panels and the necessary knowledge in the field of electrical engineering.

In the module "**Livestock protection fences**" the participants build fully functional livestock protection fences even in the field: On the basis of practical work, all the necessary activities involved in the construction of a livestock protection fence are shown and carried out by the participants themselves. Special emphasis will be placed on the influence of the terrain on the fence construction, how a fence can be built despite difficult terrain, which meets the requirements of livestock protection (sufficient power

supply, avoidance of entry possibilities - routing, subsoil, avoidance of areas susceptible to faults ...). It should also be explained how much work is required for which fence with all the additional activities (e.g. mowing a route...).

The goal of this module is to gain basic knowledge in handling evidence and its **documentation of potential damages and related events** (e.g. escape of animals with injuries). This includes the securing of the pasture where the damage has occurred, what has to be considered when taking photographs, which notes have to be taken and how to handle carcasses before and after an assessment.

The topic of large carnivores is highly emotional and especially in the context of a damage incident, the situation is stressful for everyone involved. Appropriate **communication skills** are necessary for success and cooperation. The team leader is of particular importance in his role. The training includes appropriate skills in leading conflict discussions, guiding an inhomogeneous group of people and also dealing with media inquiries.

5. PRINCIPLES OF USE

The intervention area of a team is firstly the pasture area where the original damage occurred and secondly, depending on the environment and available labor, the neighboring pastures. The most important point in relation to the surrounding pastures is to provide information on what has happened and advice on necessary steps in coordination with all other pasture, shepherds and livestock owners in the area. The use of the most modern means of communication (e.g. messenger services), adapted to the local stakeholders, is a given. The initial information for the emergency team must come from the local damage investigator, after consultation with the Austria Center (see next chapter). The damage investigator is the contact who has to connect and inform all parties involved at the beginning.

In order to minimize the probability of false alarms, an emergency team should only be alerted after an assessment of a possible damage occurrence by a large carnivore by the damage investigator on site. Moreover, a telephone consultation with the Austria Center Bear, Wolf, Lynx should help to determine a high probability of a damage by a large carnivore. Clear communication channels must be established and all contact details (at least telephone, mobile, landline and e-mail) must be kept up to date and checked regularly (checklist). A kind of backup contact point should also be set up (e.g. an informed central office in a federal state administration or similar).

5.1 Alarms, Procedures

After the notification of the Austria center by the damage investigator, who provides an assessment of the situation and discusses the possibilities with the pasture managers concerned, the WPIU is triggered. The details of the operation are then assessed by the respective team leader on site, if necessary on the basis of several consultations with the Austrian Center.

As a prerequisite for a possible deployment of a Wolf Prevention Intervention Unit, is a high probability of a "current" or "fresh" damage caused by a large carnivore determined by the damage investigator. "Fresh" usually means not older than 24 hours, since after this time it can be assumed that the greatest danger on site is over again. If there are, however, in addition to an older damage, other current indications of a wolf presence (stepping seal, camera trap photo, ...) the deployment of a team can still be considered. If a damage does not concern grazing animals, but takes place in the immediate vicinity of a pasture, the deployment of a team is also possible in principle, if it happened very recently. These cases are to be discussed in detail, especially in the context of the necessary arrangements.

It is of fundamental importance that the parties involved can be reached as easily as possible, even outside normal office hours, at weekends and on public holidays. Organizational measures must be taken to ensure that communication between the on-site damage investigator and the Austria Center as the coordinating office is ensured at all times.

From the beginning of a specific deployment on a pasture, the maximum duration of the support must be agreed upon with all those concerned, both for manpower and material. In general, it is advisable that the team does not stay in one area for more than two days. Parts of the material used (e.g. fence material) can stay longer, but after about seven days the team should be fully operational again with all its equipment. Whether the fencing material remains with the person responsible for the pasture, e.g. through promotional measures, or is dismantled by the team, is to be regulated in the respective federal state and case-specifically.

Procedure

1. Notification of the damage investigator:

Farmers/herdsmen, in the further course called pasture-responsible person, informs the responsible damage investigator or wolf representative according to the given procedures in the respective federal state.

2. First assessment on site:

Damage investigators collect first information: If, according to his assessment, it is a fresh damage caused by a large carnivore. "fresh" means from the last 24 hours. In order to facilitate the decision in case of doubt, the damage investigator can consult an expert online on site, e.g. by sending pictures of the dead/injured animal taken with a smartphone and discussing them on the phone.

3. Report to the Austrian Center:

Following this initial preliminary assessment, the expert discusses with the pasture-responsible person, a possible deployment of an emergency team. If the person responsible for the pasture agrees, only the damage investigator reports to the Austrian Center that help is needed, using a checklist (see appendix). Only the Austria Center will trigger the emergency team on its own independent decision after this conversation.

4. The Austria Center activates the emergency team:

The team leader receives the information from the Austria Center, assesses the situation and takes first measures after consultation, informs the necessary team members and the team prepares to leave.

5. The emergency team is active on site:

Alongside the assistance provided on the original pasture, the team leader is also responsible for coordinating or passing on information to the neighborhood in order to prevent damage on surrounding pastures (**intervention at a preventive level**).

If time and resources allow it, concrete measures can also be taken on nearby pastures. Here, coordination with already existing warning systems, as they are partly already operated by federal states or interest groups, is necessary.

After completion of the actual work, suggestions and assistance are given for the improvement and implementation of measures (e.g. for targeted grazing for fences, assistance in the installation and maintenance use of electric fences), provision of contact details of prevention advisors and for further damage handling.

6. Return & follow-up, deployment protocol:

After the return from an operation, the following activities are to be carried out or planned under the responsibility of the team leader:

- Completion of the documentation of the assignment, notification of completion and transmission to the Austria Center Bear, Wolf, Lynx (see next chapter)
- Preparations/organization of dismantling: Yes/No, when/by whom?
- Completion of administrative support: Contact advice, damage report
- Restore service material

5.2. Documentation and evaluation

The damage inspector will document and evaluate each damage case on site. The damage inspector will also evaluate which protection systems the breeder uses and his needs.

In order to measure the effectiveness of the mitigation strategies and the prevention measures adopted, an **operating protocol** of the field activity has been created at international level (Annex 1), minor changes can be expected at country level.

The documentation must include in any case:

1. Damage event

location, date, species affected, number of presumed killed/ injured animals, number of lost animals

2. Characteristics of the pasture and its surroundings

Brief description of the pasture and its surroundings: Type of pasture, grazing system (alpine pasture...), number of animals on the pasture, vegetation, terrain, clarity (forest/bushes, distribution of forage areas and water points, rocks, steepness, embedded in the landscape), existing livestock protection measures, surrounding pastures to be informed

3. Details of the application and procedure

Time of alerting of the team, contact of damage investigator and pasture manager, duration, content of agreements, time of arrival on the pasture, available helpers on site, preparatory work already done, time of end of the assignment and return

4. Description of the measures carried out on the pasture

Type of measure (pen construction, animal search...), duration, equipment used, more detailed description

5. Description of accompanying measures

Type (consulting and communication activity), duration, target group (pastures in the surrounding area, media contacts)

6. APPENDIX

6.1. Definitions

Damage (event, incident)

The result of an attack by a large carnivore on grazing livestock with dead, wounded or missing animals on a pasture.

Damage investigator

Specially trained personnel of a competent authority (usually federal state administration) or directly commissioned by it to assess whether a damage was caused by a large carnivore. A damage investigator is also responsible for taking DNA samples. Their assessment is the basis for compensation payments to the farmer. The data obtained is also part of monitoring programs at national level. Advice on preventative measures, etc. is not their responsibility, but should be passed on either to the emergency team or to appropriate institutions. This means that a damage investigator knows about the possibilities of an emergency team and knows where advice on the various issues is readily available.

Preventive measures - livestock protection

This includes all measures that are suitable to protect grazing livestock from damage by large carnivores or that help to minimize the risk of such damage. Among the most frequently applied measures are technical options such as suitable fencing and/or the keeping of liveguard dogs or management measures such as the use of pen constructions.

Compensation measures

Damage limitation measures help to minimize damage that has already occurred: In most cases these are indirect measures, such as financial measures - compensation payments.

Pasture

A defined area, enclosed or open, suitable for grazing and regularly used over long periods of time.

Alpine pasture

An alpine pasture covers a large, inhomogeneous area characterized by large areas of rough terrain (steep slopes, thin soils, rocky terrain), often in remote locations and sometimes only accessible on foot. It also includes parts that are not directly used as pasture. Such remote, difficult to access high pastures are often completely detached from a farm, without the constant presence of farmers or shepherds. The cattle on alpine pastures usually graze freely without stables.

6.2. Checklist: Procedures for alerting an emergency team

Farmer notifies damage investigator → Damage investigator informs Austria Center Bear, Wolf, Lynx → Austrian Center Bear, Wolf, Lynx assesses and decides, dispatches team → team leader contacts person responsible for pasture

1. The person responsible for the pasture notifies the responsible expert or wolf commissioner according to the given procedures in the respective federal state.

2. Damage investigator discusses possible use with the person responsible for the pasture, collects first information
3. Only the damage investigator reports to the Austria Center that help is needed, using a checklist
4. Only the Austria Center triggers the emergency team

6.3 Checklist Damage investigator - Consultation/Info Austrian Center

Damage investigator:

Place/ alpine pasture:

Rough description alpine pasture/ pasture:

Date:

Contact person pasture:

Phone number:

How to get to the location (car, tractor, footpath):

Information about the attack

- Documentation photo (cell phone)
- From whom is the assault probably:
- Attacked animal species:
- Approx. number of animals in the pasture:
- Short description of what is expected from the intervention team:
- What to do if additional dead animals are detected:

6.4 Checklist for head of operations:

Name of head of operations:

Contact is established - inquiry of (function and name):

Place: Date:

Meeting point:

Reachability - Vehicle / on foot:

Vehicle: Kilometer:

Walking time to the location:

Arrival at place of assignment:

End of assignment:

Step 1: Assessment of the assignment - preparation

- Providing an overview of the measures on site - discussion with pasture managers:
- What will be necessary (fence, rounding up...)
- Personnel available on site
- Animal species and number of animals
- Expected operation length
- Accommodation
- Neighborhood information transfer

Step 2: Conclusion

- Necessary input material
- Team strength/team members
- Implementation - instruction/information to the team
- Personnel organization:
 - Who is responsible for the pasture and animals - rounding up
 - Who determines the location and size of the pen, fencing

Step 3: Implementation on the pasture

- Coordination/ information transfer in the neighborhood - necessary details/supplements, possibly assistance

Step 4: Completion of the assignment

- Documentation of the application
- Material decommissioning: Yes/No, when/by whom?
- Administrative assistance: Contact advice, damage report
- Return, follow-up (restore operational readiness)