

## **SRIX4Veg Logistics and Practical Details**

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- Part 1: Equipment logistics and UAV regulations in Spain
- Part 2: Participants' Travel and Accommodation
- Part 3: Health and Safety





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- Part 1: Equipment logistics and UAV regulations in Spain
- Shipping and storage 1.
- UAV EU licence and insurance 2.

- Part 2: Participants' travel and Accommodation
- Part 3: General information and Health and Safety



## **Equipment logistics: Shipping and Storage**



- 1. Instruments have to be shipped **prior** to the campaign (~ 1 week before) if flying
- 2. We recommend that participants use the shipping companies' tracking facilities
- 3. Storage will be ensured at the Albacete campus of UCLM
- 4. Details of the instruments must be provided



Contact details printed on the boxes / Labelling of boxes

Dimension and number of the boxes for each instrument

(UAV + other instruments used to support the UAV acquisition)

Number/Sets of batteries available

Battery type

UAV model

Safety equipment







## **Equipment logistics: Potential Issues**



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**1. LiPo (Lithium Polymer) batteries on a plane**:

Wh rating	IATA guideline
Up to 100 Wh	Up to 20 spare batteries can be taken in carry-on baggage
100 – 160 Wh	A maximum of 2 spare batteries may be taken along
More than 160 Wh	Transport only as dangerous goods freight

- 2. Shipping: Most couriers are reluctant/prohibit the shipping of LiPo batteries
- 3. To get relief from import duty it is possible to get a Temporary Admission (ATA) Carnet (for a fee) which is an international customs and temporary import/export document.
- Check the operating temperatures of your instruments since Spain can exceed 40°C during the SRIX4Veg time window.



## **UAV regulations in Spain**

SRIX4Veg activity in the "**Open**" category and "**A3**" subcategory

- VLOS must be maintained at all times
- Maximum flight height limit, from the take-off point, of 120 m
- No fly over uninvolved people
- A distance of 150 m or more from congested areas must be maintained
- Easy Access Rules for UAS EASA document:

<u>https://www.easa.europa.eu/document-library/easy-access-rules/eas</u>



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#### Regulation EU 2019/947 and 2019/945

UAS	UAS Operation		Drone operator/pilot		
Max weight	Subcategory	Operational restrictions	Drone operator registration	Remote pilot competence	Remote pilot minimum age
< 250 g	A1 (can also fly in subcategory A3)	<ul> <li>No flight expected over uninvolved people (if it happens, overflight should be minimised)</li> <li>No flight over assemblies of people</li> </ul>	No, unless camera / sensor on board and the drone is not a toy	<ul> <li>No training required</li> </ul>	No minimum age
< 500 g			Yes	<ul> <li>Read carefully the user manual</li> <li>Complete the training and pass the exam defined by your national competent authority or have a 'Proof of completion for online training' for A1/A3 'open' subcategory</li> </ul>	16*
< 2 kg	A2 (can also fly in subcategory A3)	<ul> <li>No flying over uninvolved people</li> <li>Keep a horizontal distance of 50 m from uninvolved people</li> </ul>	Yes	<ul> <li>Read carefully the user manual</li> <li>Complete the training and pass the exam defined by your national competent authority or have a 'Remote pilot certificate of competency' for A2 'open' subcategory</li> </ul>	16*
< 25 kg	A3	<ul> <li>Do not fly near or over people</li> <li>Fly at least 150 m away from residential, commercial or industrial areas</li> </ul>	Yes	<ul> <li>Read carefully the user manual</li> <li>Complete the training and pass the exam defined by your national competent authority or have a 'Proof of completion for online training' for A1/A3 'open' subcategory</li> </ul>	16*







### **UAV regulations: Flight Restrictions Zones**





Las Tiesas is partially covered by the Aeródromo La Gineta to the north-east of the site.

Flights cannot be freely made at any unplanned location on the site and must be restricted to the target flight zone.







## **UAV regulations: EU Licence**

 Registration with AESA (Spanish Aviation Safety and Security Agency) is mandatory for the drone pilot to obtain your drone operator registration number that needs to be displayed with a sticker on the drone you fly.

 Non-EU participants who have qualifications in their specific countries will need to check themselves whether those are acceptable in EU. Online courses exist to obtain the certificate for flying an UAV in the open category in all EU countries.











## **UAV regulations: Insurance**



 Each participant is liable for their own UAV and any damages that may be caused by it, or any theft, damage or loss caused to their UAV, payload and property while taking part in SRIX4Veg.

 We recommend that participants have an insurance policy associated with their UAV to cover civil liability to third parties for damages that may arise





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Part 1: Equipment logistics and UAV regulations in Spain

- Part 2: Travel logistics
- 1. Participants' travel
- 2. Participants' accommodation
- Part 3: General information and Health and Safety



### **Travel from airports to Albacete**



Elche

Morella

Castellón

de la Plana

Villarreal







Pozoblanco uevo



## Accommodation





We recommend to book the accommodation in advance (at your expenses!) **26 min** 24.5 km Albacete

#### Las Tiesas is located ~25km from Albacete









- Part 1: Equipment logistics and UAV regulations in Spain
- Part 2: Participants travel and Accommodation

- Part 3: Health and Safety and final discussion
- 1. Health and safety



### **Health and Safety**



- Amenities: toilets on site but food/water need to be prepared the day before
- This region of Spain is very hot and dry in the proposed SRIX4Veg campaign window (bring SPF, long trousers and long-sleeved t-shirts)
- Participants should communicate, before the campaign, any special requirements for any of the team members joining the exercise
- Someone with a first aid qualification in each team would be highly recommended
- Check the **operating temperatures** of the instruments/batteries since this region of Spain can exceed 40°C
- Check the **wind tolerance** of the UAV platform since wind can be high because of the topography of the site







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# **Thanks for the attention!**