



NGFT Consulting

SOP's in Aerial Work: The Swiss Way

9th EASA Rotorcraft Symposium

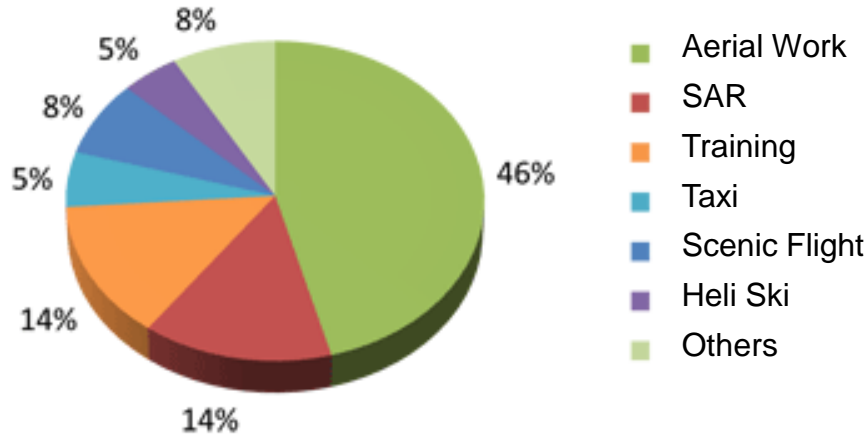
03.12.2015

Agenda

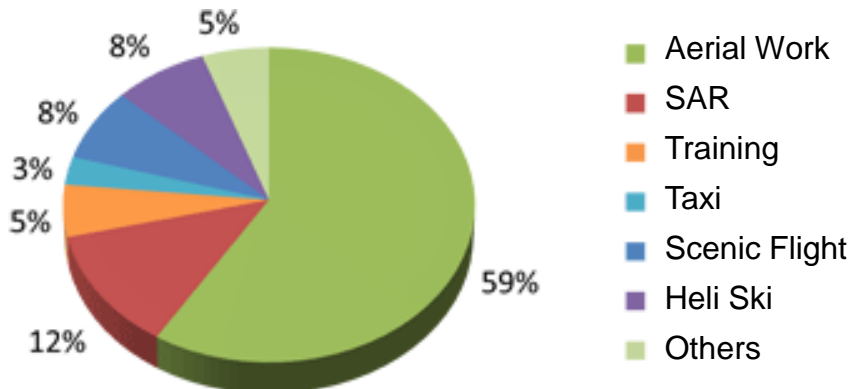
1. Swiss Helicopter Industry
2. Impact of EASA Regulation
3. Mandate to develop common SOPs for the industry
4. Structure of SOP manuals
5. Training Material
6. Timeline and benefits for European Operators

Swiss Helicopter Industry (34 AOC Holders)

Industry Overview Swiss Helicopter Operations (54'000 hours*)



Helicopter Operations in the Alps (33'000 hours*)



Core Competencies of the Swiss Industry:

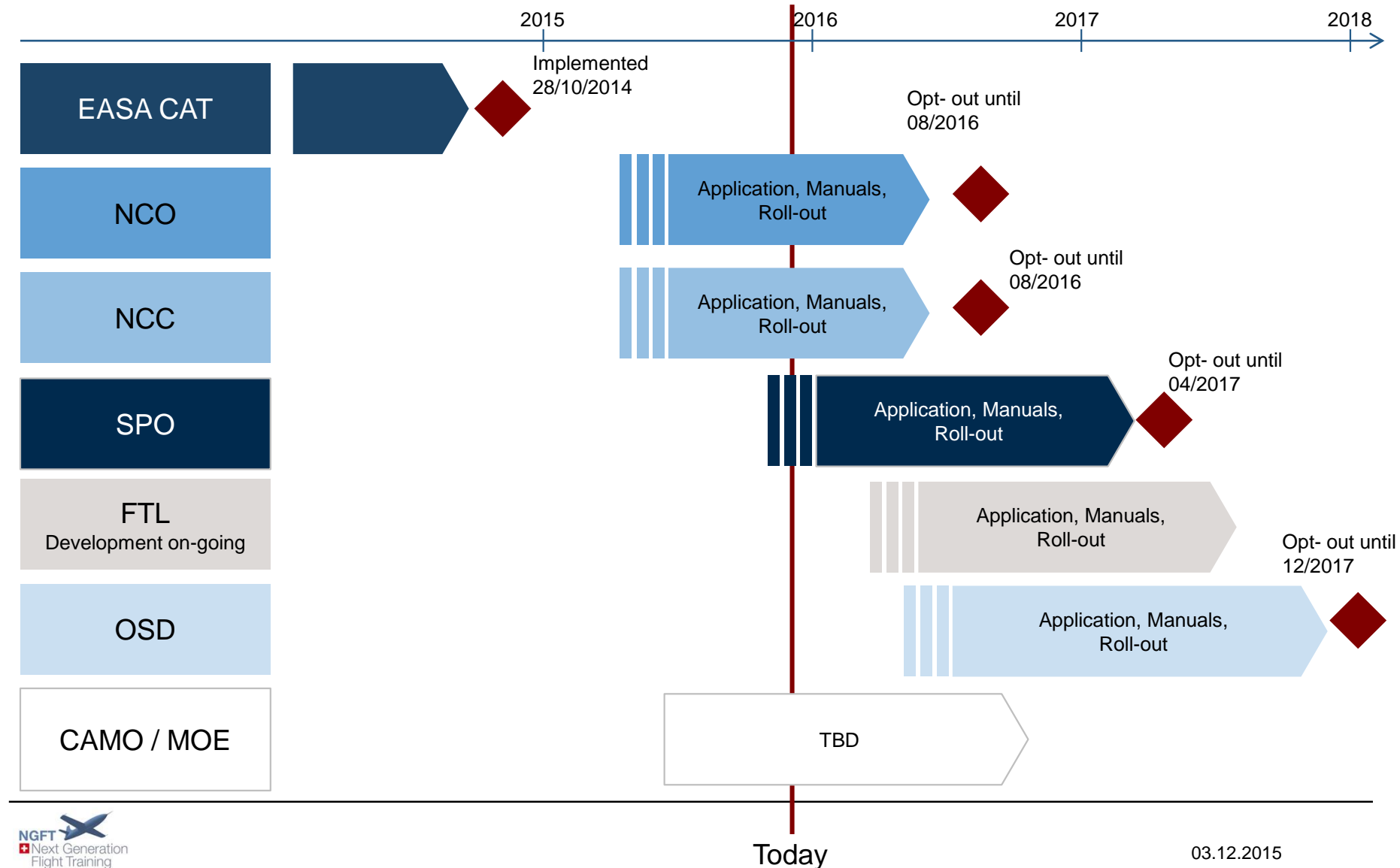
- Complex Aerial Work Operations
- High Density Altitude Operations
- Search and Rescue
- Mountain Training
- VIP Operations

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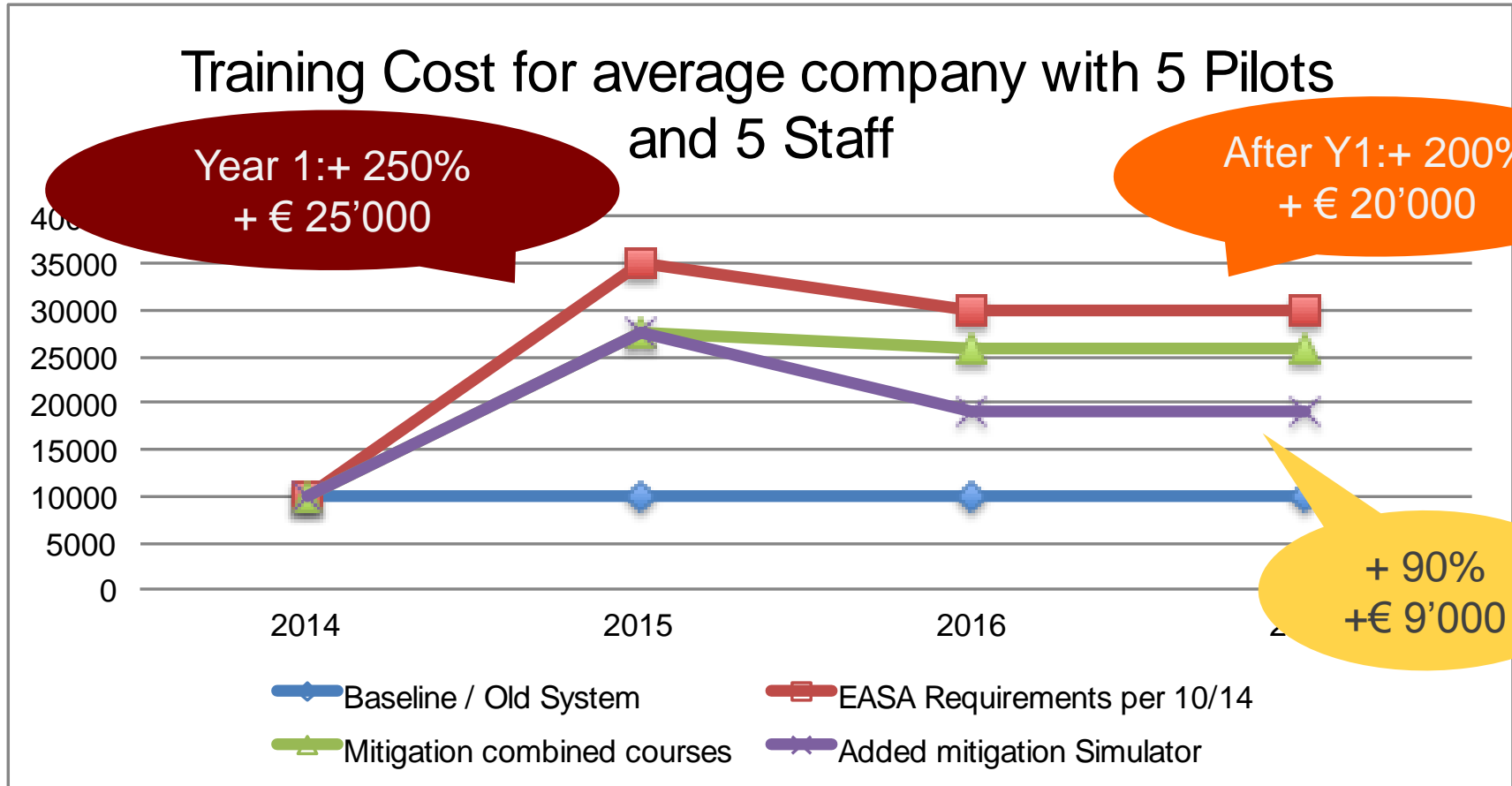
High Density Altitude Operations



EASA Regulation: Massive Changes for Swiss Operators



Significant Increase in Training Costs per Company

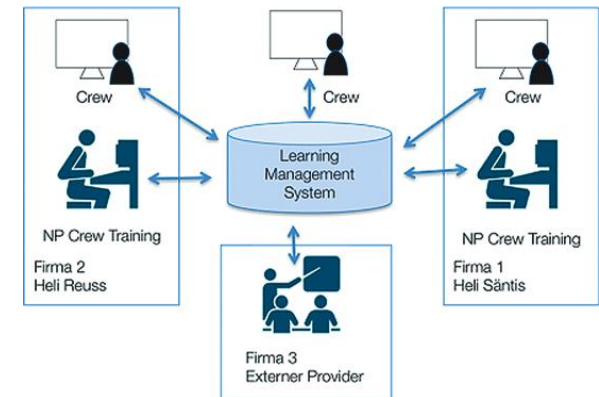


Additional Costs* YoY to comply with EASA Rules: € 1.2 Mio

The Swiss Approach: Out-Sourcing of Non-Core Activities

20+ AOC holders decided to outsource non-core tasks to one common provider which has led to the following results:

- Identical Operating Manuals (OM A-D) based on “generic” manuals provided by the Swiss Helicopter Association (SHA)
- Identical training content provided by central Learning Management System
- Common platform to store pilot / staff data
- Paperless training administration
- Close collaboration with Swiss Authorities



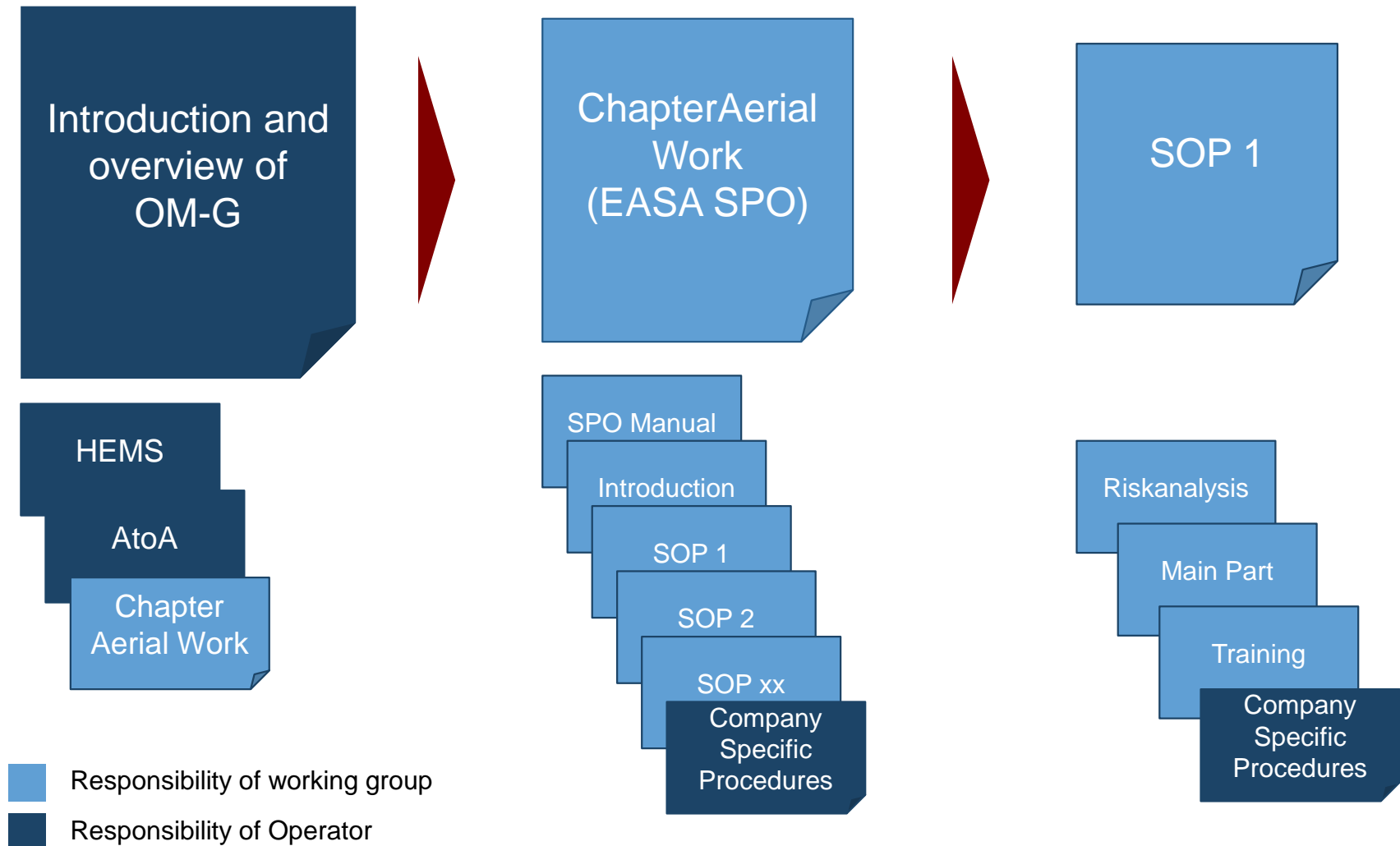
- All Swiss AOC holders have obtained their new EASA based AOC
- All pilots and staff have been trained to comply with EASA regulation
- New projects have been identified to further reduce complexity in day to day operations

Mandate to develop common SOPs for the Swiss Industry

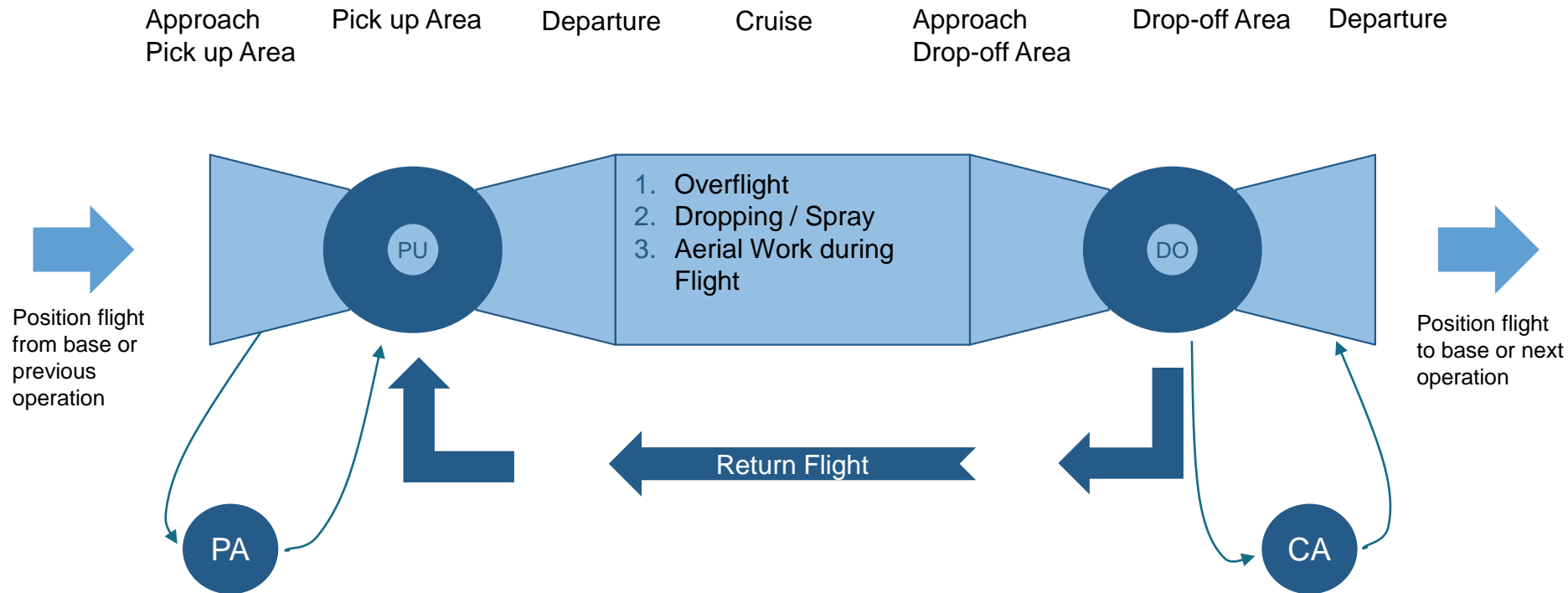
Based on the same approach as during EASA implementation, a SOP working group will:

- Develop standardized SPO manuals incl. 25 SOPs in four languages
 - Develop NCC and NCO manuals as required
 - Distribute material to all interested parties
 - Ensure harmonization across the industry regarding crew requirements and training
 - Provide training material to all operators to increase level of safety
 - Foster close collaboration with the Swiss and any other interested national authorities to support certification and implementation
- Project organized and supported by Swiss Helicopter Association (SHA)
Financial support obtained from Swiss National Authorities (FOCA)

Structure of SOP Manuals



Common Elements of Aerial Work Operations



Preparation Area (PA):
Material, personnel is being prepared for the operation. Can be a different location than the Pick up Area

Clean Up Area (CA):
Material, Personnel is collected, checked and stowed away. Preparation Area and Clean up Area are usually identical

Training Material

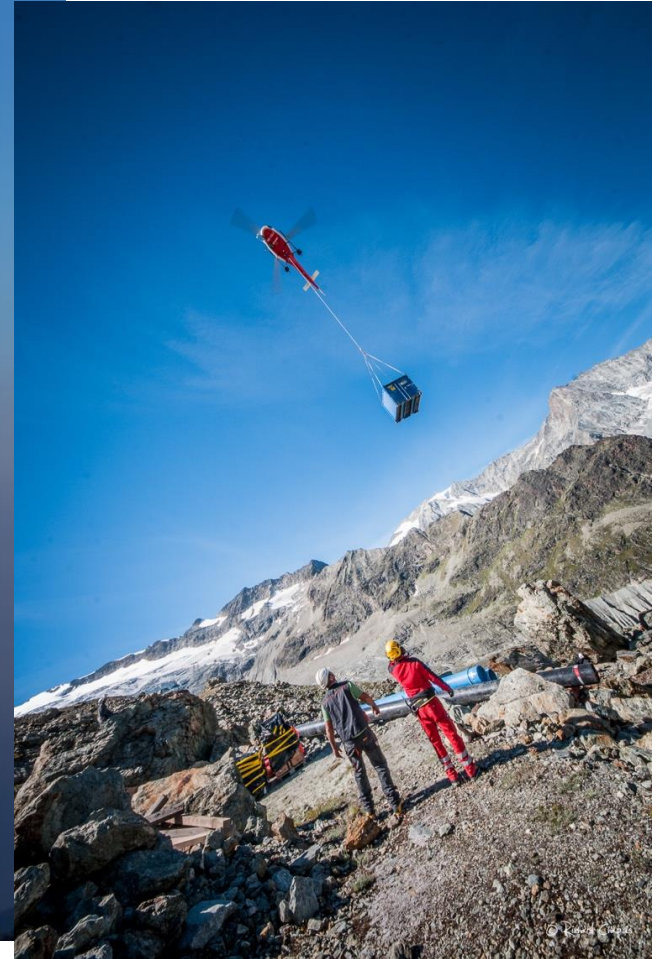
- Training Material will be produced to ensure harmonized training and instruction based on industry best practice
- Material will be updated and expanded if new operations are introduced into system
- Typical training set will include:
 - Training syllabus
 - Slides and student handout
 - Multiple Choice Tests (classroom or LMS)
 - Multimedia Instructional Material (photos, movie sequences)
 - Access to LMS for access to additional material
- The Training Material will be produced initially in English, German, French and Italian

Example Movie for Training Material

Timeline and benefits for European Operators

- First round of SOPs completed (8 SOPs)
 - Initial feed-back received from FOCA
 - 25 SOPs finalized and signed-off by FOCA end of April 2016
 - Training Material available summer 2016 for implementation during summer / fall 2016
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- Once signed off by the Swiss National Authorities (FOCA), these documents will be made available to all interested parties
 - Reduced costs thanks to financial support of Swiss Authorities
 - Interested parties to use these documents will be kept up to date on progress

Thank you for your attention



Appendix

Proposed list of SOPs

Block 1

- External load (inkl. operations in hostile congested)
- Logging / Spez Ops incl. standing trees
- Hover (toe in landing)
- Sightseeing / AtoA
- Flight Meetings / Events
- Avalanche mining (incl. specialized work e.g. Daisy Bell)
- HEC
- Parachute incl. D-BAG

- Survey / Powerline patrol
- Construction / Montage
- HHO
- Photo / News / Media
- Fire fighting
- Police Ops (OM-Civil)
- Clearing saw
- Multi operators events
- Heliski

Block 2 (to be confirmed)

- Cable Towing
- Wildlife Control
- Spray
- HDF (Helicopter Departure in Fog)
- Cablecar-Evacuation
- Divers / Swimmers
- NIT
- Flights over Water
- Operations with horizontal boom (e.g. Windmill Cleaning)
- Transport of Animals
- Landings on moving areas (e.g. ships, platforms)