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2nd Panel Discussions

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Outlook: Solutions for increased mobility & aircraft availability

- Bridge the gap: upgrade existing fleets
- Fast capability increase: use off-the-shelves solutions
- Increase a/c availability: move towards integrated support solutions
- Speed up military programs: ideas to achieve simpler and faster qualifications processes
- Support future capabilities development: the Future Transport Helicopter
- Secure the future: support innovation through R&T funding



Bridge the gap: upgrade existing fleets

- Mobility can be increased by bridging the gap, between now and when future programs become available, with upgrades / retrofits of existing fleets of military and civil operators.
- Such solutions include for instance the Puma / Super Puma / Cougar family:
 - A pool of 10 to 15 a/c is potentially available for immediate upgrade in the coming 3 to 18 months and an additional pool of 30 to 40 a/c in the next 18 to 36 months. In total, up to 55 a/c could be made available over 3 years.
 - These a/c have an outstanding track record in OPEX (ex: Pumas deployed by the UK MOD to Iraq in 2007 demonstrated an 80% readiness, one of the highest level for helicopters engaged in this conflict)
 - They also provide unrivaled performance to meet operators' specific requirements, in particular:
 - NVG capability,
 - easiness to deploy (C130, C160),
 - low fuel consumption
 - low maintenance costs
 - high safety for troop transport





Fast capability increase: use off-the-shelves solutions

- "Off-the-shelves" solutions, which are immediately available and which have already been proven during OPEX, can be used by customers in order to rapidly increase their capability for a particular mission.
- The Caracal (EC725):
 - Lebanon (2006): resident evacuation, 400 flight hours at 90% readiness (data: Air Force), a/c dispatched from maritime platforms
 - Afghanistan (2007-2009): various missions (troop transport, escort, C-SAR by French Special Forces, VIP transportation of President Karzaï), 1300 flight hours at 94% readiness (data: ISAF) in hostile environment (temperature ranging from -20° to +40°, altitude >2000m)
- The LUH (EC145):
 - 10,000 flight hours for 56 a/c delivered
 - Operated by US Army & National Guards
 - OPEX: Hurricanes disaster relief (Ike, Gustav) by the National Guards in 2008





Increase a/c availability: move towards integrated support solutions

- European manufacturers are able to provide customers with integrated vertical lift solutions including <u>platforms & support</u> so that customers can dedicate their full attention to their mission. Such solutions consist of:
 - <u>Before</u> the mission: Advanced training programs, based on missiontraining and full-flight-simulator experience (ex: AS532, EC725, NH90)
 - <u>During</u> the mission: Deployed support on the field, ranging from basic spare parts availability up to comprehensive fleet availability packages (including maintenance & labor)
 - <u>After</u> the mission: flight data analysis (HUMS) to decrease costs & improve safety





Speed up military programs :

ideas to achieve simpler and faster qualifications processes

• The use of EDA and OCCAR should be promoted (no need for new agencies).

• Governance:

- Have EDA and OCCAR go beyond their role of coordination of member States of a program to take a role of "full prime contractor" with clear delegation authority from member States.
- Favour well identified Customer Leading Party (versus "unanimity-rule" driven communities) as well as Industrial Prime (versus consensus-driven Joint Ventures), for the benefit of Users, Governments and Industry.

• <u>Requirements</u>:

- Work towards more standardization of member States requirements and contribute to the decrease of the number of national variants.
- Promote the (re)use of more parts coming from commercial or existing military aircraft in order to simplify qualification and decrease costs.
- Assess industrial & technological return from a global point of view on several programs.
- <u>Qualification:</u>
 - Set up a single MTC at European level or, in a first step, get the assurance that international qualification supersedes national certifications regulations.
 - Give MDOA (Military Design Organization Authority) to Industry as already done for civilian a/c (reduced costs and faster implementation).



Support future capabilities development: the Future Transport Helicopter

- Eurocopter has started pre-feasibility and pre-design studies on a FTH (Future Transport Helicopter) in the heavy lift class (~32 tons MTOW)
- A transatlantic partnership is seen as the most favorable and probable set-up and is currently being elaborated
- Eurocopter's FTH project in a potential partnership is intended to :
 - minimize risks and maximize synergies
 - enhance existing and proven technologies
 - offer outstanding performance and fully meet customers' requirements (cabin volume, MTOW, air transportability, high/hot performance, range, lifecycle cost)
- Supported by major EDA members, the FTH project should be entrusted with the EDA as a "category B" and lighthouse project



Secure the future: support Innovation through R&T funding

- Innovation is key to enable European manufacturers <u>keep their leadership</u> and compete with traditional & emerging competitors
- Innovation is key to develop platforms and software <u>meeting customers</u> requirements (integration of complex sensors and communication suites) while at the same time reducing operating costs.
- Innovation is key to progress towards <u>green helicopters</u> without sacrificing mission performance and requirements (hot/high, range, speed)



