



# ATR FAL in Russia - Meeting in Moscow

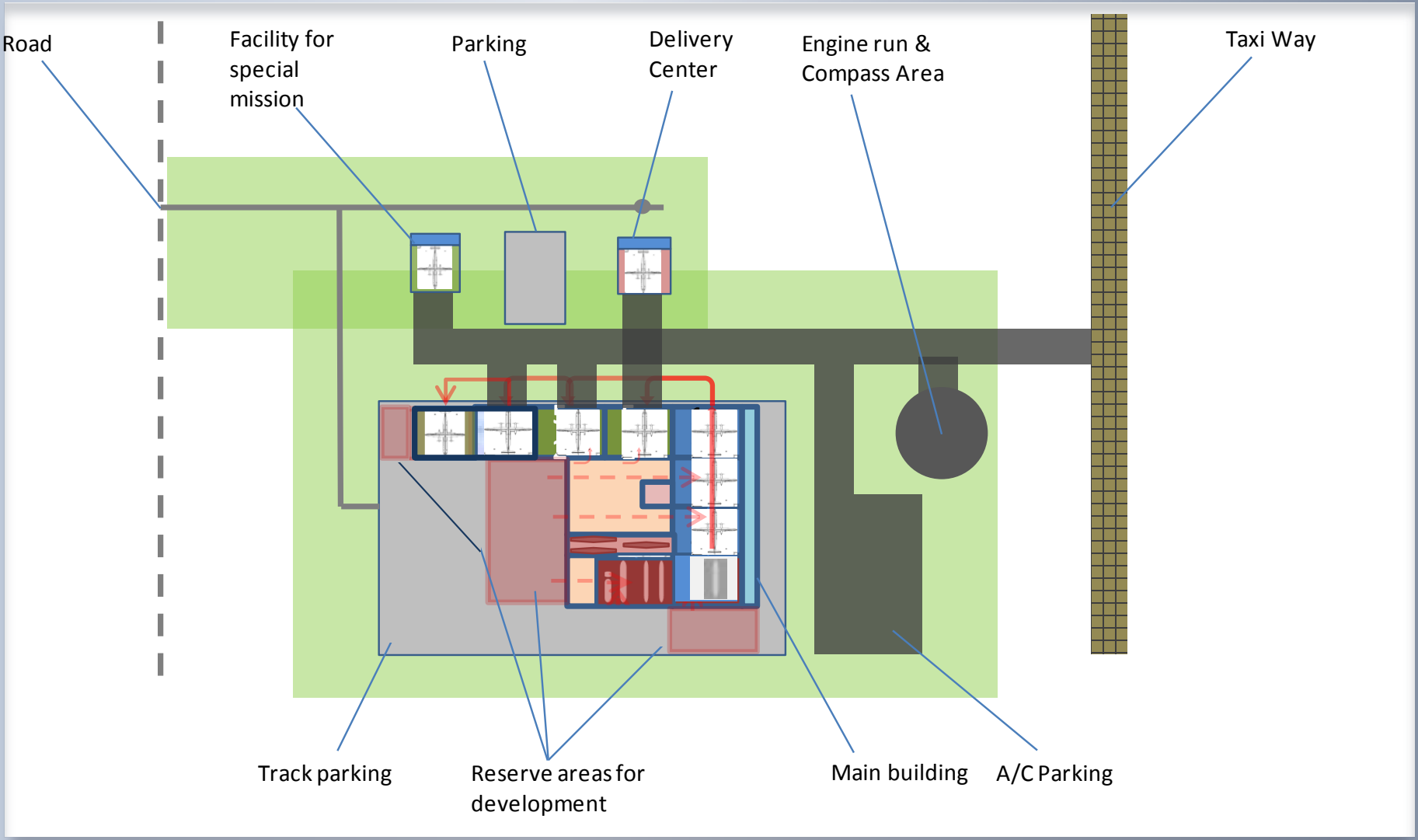
27<sup>th</sup>-28<sup>th</sup> November 2013

# Agenda for 27<sup>th</sup> – 28<sup>th</sup> November

- New industrial assumptions agreed on 20<sup>th</sup> November
- Rostec' inputs latest update on facility construction plan and data from constructions companies
- Update of facilities and plant lay-out, HR sizing, hiring plan and training plan/resources in accordance with new assumptions (Rostec)
- WBS CAPEX, RC/NRC review
- Update and feasibility of logistics concept

# RUS FAL – ROSTEC turnkey solution

Site and Infrastructures



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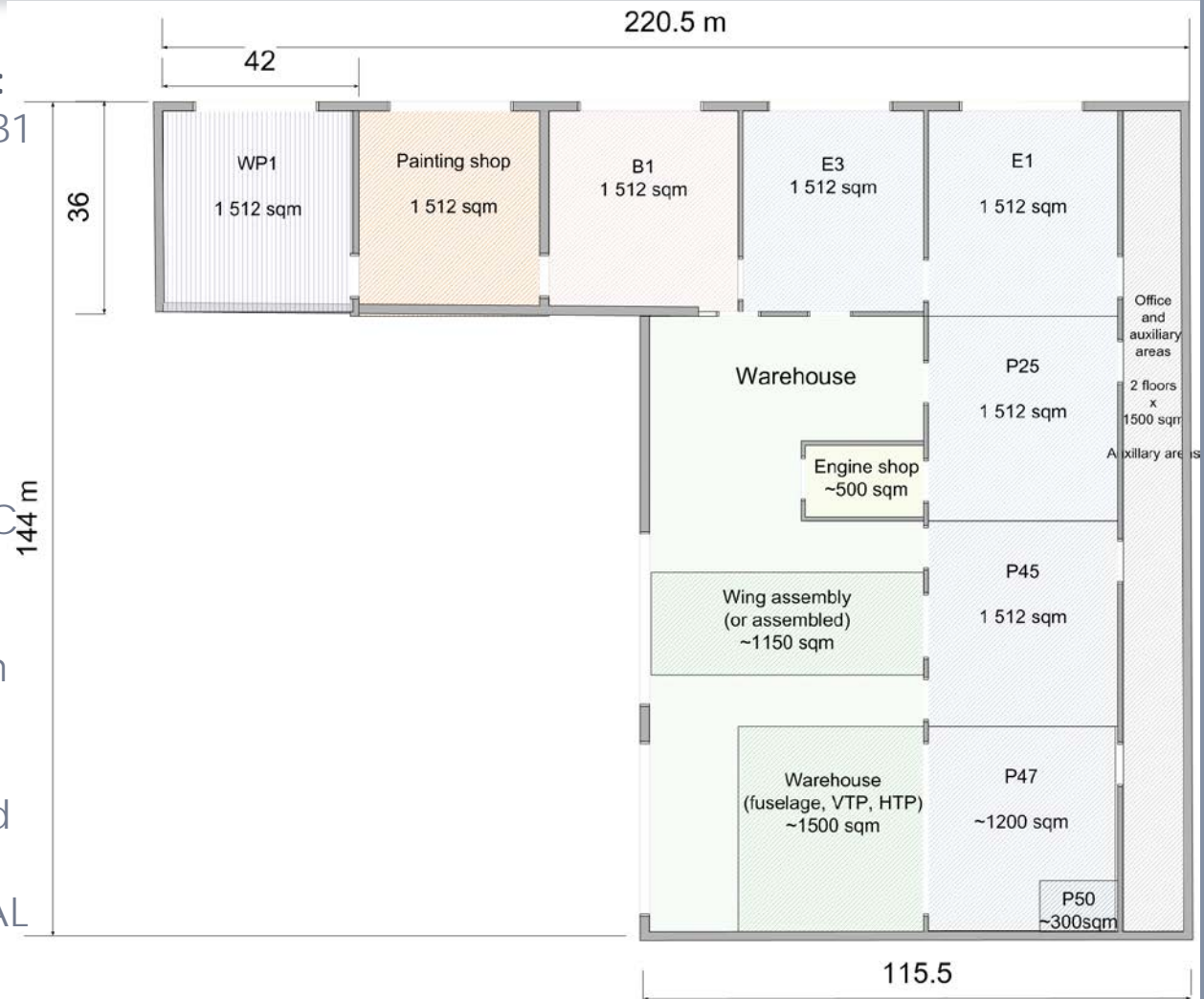


# RUS FAL – ROSTEC turnkey solution

Site and  
Infrastructures

## Airbus recommendations:

- Swap paint shop with B1 to be coherent with industrial flow / ease future development
- Flight line office and facilities for test necessary in parking area
- 1 single position for A/C delivery may be bottleneck. Use of special mission position recommended as back-up
- Specific crane needed to move wing MCA from logistic area to FAL A



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# RUS FAL – Land & Facilities CAPEX update

Site and  
Infrastructures

No.	Building / facility of ATR FAL RUS	Qty	Cost estimation CoC IFF	Comment
1	Final Phase Hangar		0.00 Mio.\$	Part of FAL facilities
2	Run Up Facility		0.00 Mio.\$	Included in turnkey solution
3	Gauging Area		0.00 Mio.\$	It can be done in FAL B Hangar
4	Fuel Station		0.00 Mio.\$	Service provided by Airport
5	Garosolve / Hydraulic		0.00 Mio.\$	Not necessary
6	Delivery Center		0.00 Mio.\$	Included in turnkey solution
7	Periport		0.00 Mio.\$	See Delivery Centre
8	Weighing Hangar		0.00 Mio.\$	Can be performed in FAL Hangar
9	FAL Hangar		53.00 Mio.\$	Turnkey solution quote by ROSTEC. Include extra E3-E1 position
10	Paintshop		0.00 Mio.\$	Building & Environmental control included in turnkey solution. Paint shop furnishing & tools not included
11	VTP		0.00 Mio.\$	Included in Paint shop
13	Powerhouse		0.00 Mio.\$	For Heating / Air conditioning / Power supply included in turnkey solution
14	Service Building		0.00 Mio.\$	De-icing station - Fire Brigade services provided by Ulyanovsk Airport
15	MCA Hangar		0.00 Mio.\$	Part of Logistic centre
16	Logistic Center		0.00 Mio.\$	Included in turnkey solution
18	Restaurant & Medical		0.00 Mio.\$	Included in turnkey solution
19	Training Center		0.00 Mio.\$	All training in TLS
20	Main Gate & Security		1.50 Mio.\$	Security (gates, fences, surveillance, etc.)
21	Offices		0.50 Mio.\$	Building included in turnkey solution. Extra cost for furnishing
22	Quay Facility		1.00 Mio.\$	Provision depending on transportation concept (river)
23	Infrastructures		0.00 Mio.\$	Taxi out, paving - Parking - Miscellaneous infrastructures part of the turnkey solution
	ATR Kitting Centre (TLS)		0.30 Mio.\$	Adaptation costs
	<b>Construction Costs</b>		<b>56.3 Mio.\$</b>	
	<b>Risks</b>	<b>10%</b>	<b>5.63 Mio.\$</b>	
	<b>CoC IFF Global Secondary Cost</b>	<b>0%</b>	<b>0.00 Mio.\$</b>	
	<b>Secondary cost / Design fees</b>	<b>0%</b>	<b>0.00 Mio.\$</b>	
	<b>TOTAL</b>		<b>61.9 Mio.\$</b>	
<b>Assumptions:</b>				
Rate 24				
ATR42 & ATR72 Flex				
No cost for Land				

Total IFF Investment: **61.9 M\$**

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# RUS FAL – Jigs and Tools update

Site and  
Infrastructures

Investment	Title	2013 K\$	Comments
FAL ATR RUS Set Up (max. rate 20 ATR 42/72)	Logistic Jigs and Tools	4,500	2 logistic ship set for rate 24
	Station 50	8,000	50% minimum on free market 20% cost reduction on Russian sourcing (ROSTEC estimation)
	Station 47		
	Station 45		
	Station 25		
	Station E1		
	Station E3		
	Customisation tools (FAL B)	2,700	2 Positions fully equipped 50% minimum on free market 20% cost reduction on Russian sourcing (ROSTEC estimation)
	Flight line and FAL mobile test equipment (GSE)	3,750	EU sourcing
	Paint Shop tools	3,000	Free market
	Small Items	1,500	EU sourcing
	Catalogue Items incl. Initial set up consumables	7,500	ROSTEC input
Total New FAL		31,500	

Total J&T Investment: **31,5 M\$**

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# RUS FAL – Transport & Logistic Cost update

- Hybrid solution (Air/Sea/Road) kept as baseline for BC
  - 3 months 2 Antonov
  - 9 months sea/road
- Opportunity identified to ship wing & fuselage in one single Antonov
  - Detailed study necessary to
    - Technical validate the option
    - Evaluate associated NRC (specific jigs required)
    - Estimate lead-time for implementation
  - Potential saving of 415 K\$ per ship-set (RC)
- Opportunity identified to further reduce sea/road costs
  - Up to 20% Vs. current figures
  - Detailed study by forwarder required

# RUS FAL – New Assumptions (22/11/2013)

New  
Assumptions

- Following a meeting between ROSTEC & Airbus some of the main assumptions of the Industrial feasibility study have changed:
  - The FAL shall be sized for **Rate 24 p.a.**
  - The Ramp-up plan foresee 8 A/C in 2015, 16 A/C in 2016, 24 A/C in 2017
  - Supply Chain ramp-up to >100 ship-set per year by 2016 is considered achievable. Associated costs are not considered in the study
- Due to the heavy impact these decisions have on the study itself and the short timeframe to review the work done, a sensitivity study to Rate 24 is done based on the Rate 10/20 results.
- An industrial solution based on 2 working shifts will be used from Phase 1

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# RUS FAL – Impact of new Rate on BC

Rate 24

ROM figures not validated	Rate 10/20	Rate 24
Land & Facility	61.9 M\$ CAPEX	No change
Jigs & Tools	28,75 M\$ CAPEX	31.5 M\$ CAPEX
Industrial Process	1 Shift Rate 10 2 Shifts Rate 20	2 Shifts
IT tools	3.5 M\$ NRC 288 K\$ RC	3.5 M\$ NRC 375 K\$ RC
Logistic & Transport	950 K€ NRC 690/469 K€ RC	1.440 M€ NRC RC unchanged
HR & Sizing	38 BC 1 Shift 43 WC	91 BC 2 Shifts 65 WC
Training	7.5 FTE	10 FTE

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