National Civil Aircraft (NCA)

Salient Features

TARGETS
- Low Acquisition, Operating and Maintenance costs
- Advanced technologies: Aerodynamics, Propulsion, Materials, Structures, Avionics, FBW FCS, IVHM
- Wide cabin with 4 abreast arrangement and overhead bins for IATA std roller bag provides narrow body comfort
- Two fuselage lengths to accommodate 70 to 100 pax
- Operations from ill-equipped airfields
- All weather operations – Enhanced and Synthetic Vision Systems
- Low Emissions
- Low Noise (FAR-36 stage IV)

TOP LEVEL AIRCRAFT REQUIREMENTS
- Max Payload:  
  - Long Fuselage: 90 pax + 1000 kg cargo
  - Short Fuselage: 70 pax + 1000 kg cargo
- Range with maximum pax:  
  - Long Fuselage: 2500 km (1350 nm)
  - Short Fuselage: 3175 km (1715 nm)
- Takeoff balanced field length (ISA+15°C, SL, MTOW):  
  - Long Fuselage: 1400 m (4600 ft)
- Approach CAS: 125 kts
- Ceiling: 12500 m (41000 ft)
- Cruise speed: 750 kmph (M=0.70) at 35000 ft
- Avionics and FCS: Open architecture, COTS, FBW, GPS,ADS, Low cost HUD, and EFB
- External Noise: Meet or exceed FAR-36 stage IV
- Cargo hold volume: 17 m³ (long fuselage)