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## **Aero Expo 2016 – Civil Aviation Convention & Exhibition “Enhancing Regional & Remote Connectivity”**

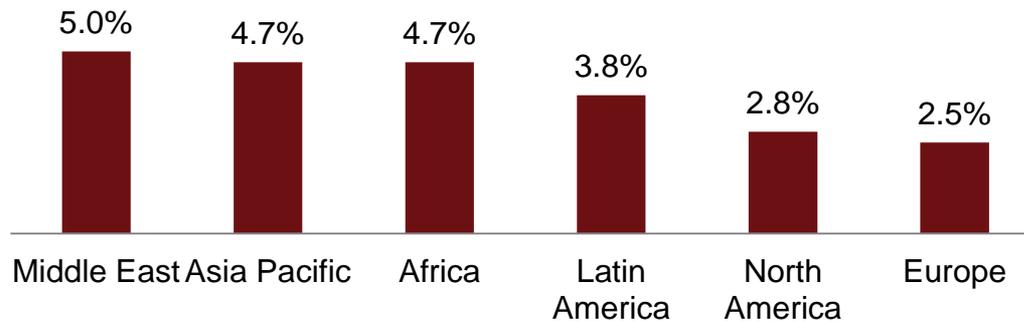
**November 18<sup>th</sup>, 2016**

**Presented To:**

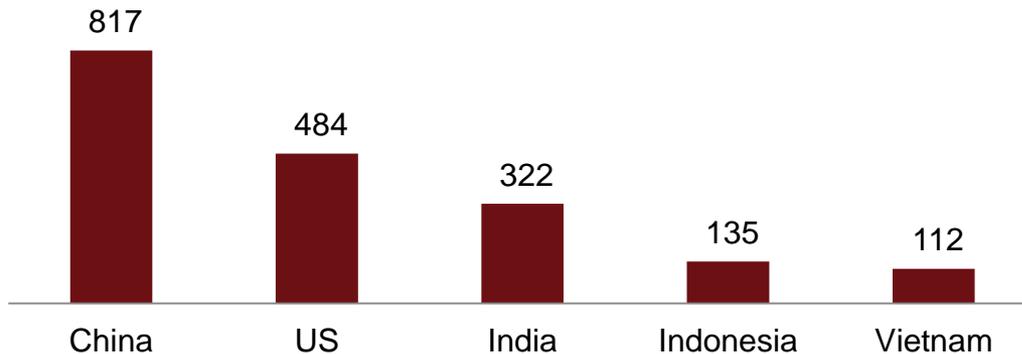
**Shri Ashok Gajapathi Raju Pusapati**  
Hon'ble Minister of Civil Aviation  
**Shri Jayant Sinha**  
MoS, Civil Aviation

# The Asia-Pacific region, and specifically, India are poised for significant growth over the next 20 years.

## Passenger traffic growth (%) over the next 20 years



## 5 fastest growing passenger markets (additional passengers) over next 20 years (in Million)



- Air traffic growth over the next 20 years will be driven by Middle East & Asia Pacific
- Within Asia Pacific, India and China will lead the growth
- India is amongst the top 3 fastest growing market after China and US (in terms of additional passengers)
- As per IATA, India is expected to outgrow UK and become the 3<sup>rd</sup> largest aviation market by 2026

# While the last decade was driven by metro contribution, regional connectivity will drive the next growth wave.

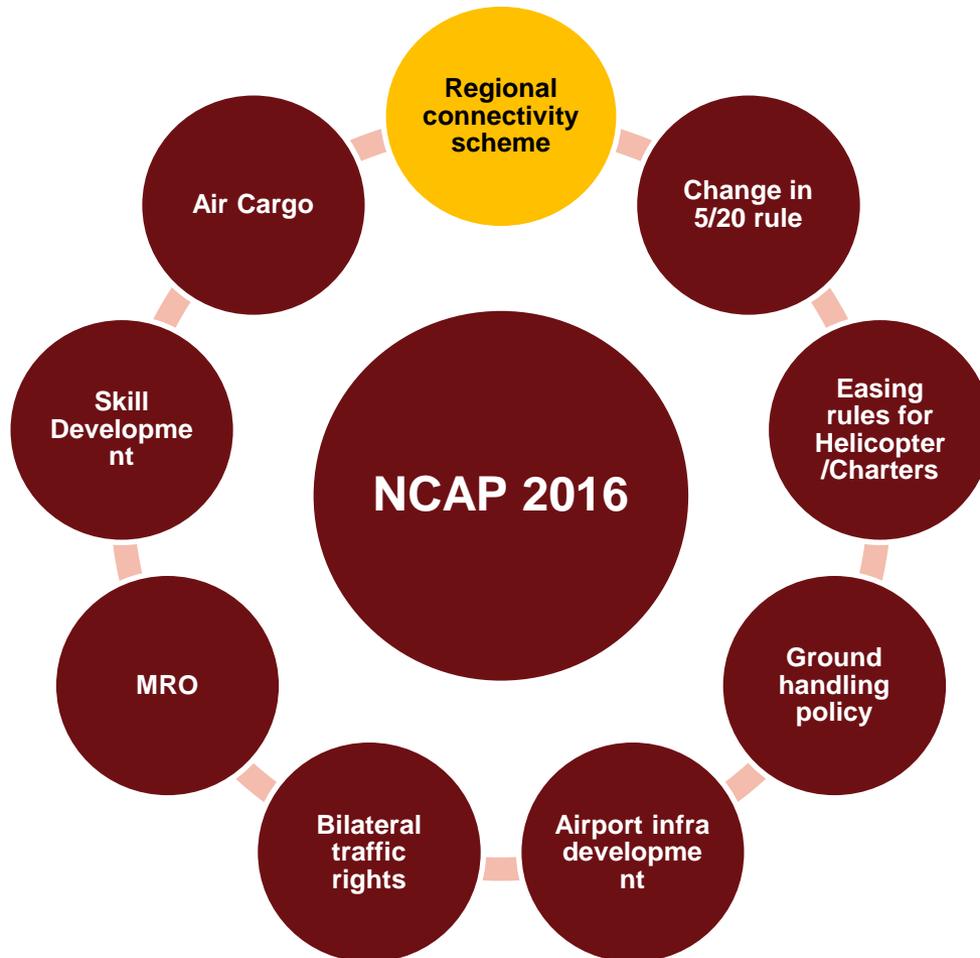
Cities	Domestic Passenger Air Traffic		
	2000-01 (Lakhs)	2009-10 (Lakhs)	2015-16 (Lakhs)
Delhi	48	178	343
Mumbai	65	174	300
Bangalore	23	80	156
Chennai	20	67	103
Kolkata	20	68	102
Hyderabad	17	48	92
Cochin	8	16	31
Ahmedabad	7	27	49
Goa	8	22	47
Pune	4	22	51
<b>Total top 10 cities</b>	<b>220</b>	<b>702</b>	<b>1274</b>
<i>CAGR (%)</i>	-	13.8%	10.4%
<b>Total Domestic Traffic</b>	<b>329</b>	<b>891</b>	<b>1689</b>
<i>CAGR (%)</i>		11.7%	11.2%
<b>Metro Traffic as % of Total Domestic Traffic</b>	<b>67%</b>	<b>79%</b>	<b>75%</b>

For FY 15 :  
78%

- Majority traffic growth in last decade has come from large cities
- However, share of top 10 cities is saturating
- Development of airport infrastructure, policy liberalization and improving living standards will drive traffic growth from regional economic and tourist centres in the future

**The flat lining of traffic share at major cities makes it is an opportune time for the Regional Connectivity Scheme.**

# The Regional Connectivity Scheme, under the aegis of National Civil Aviation Policy, will help tap this momentum.

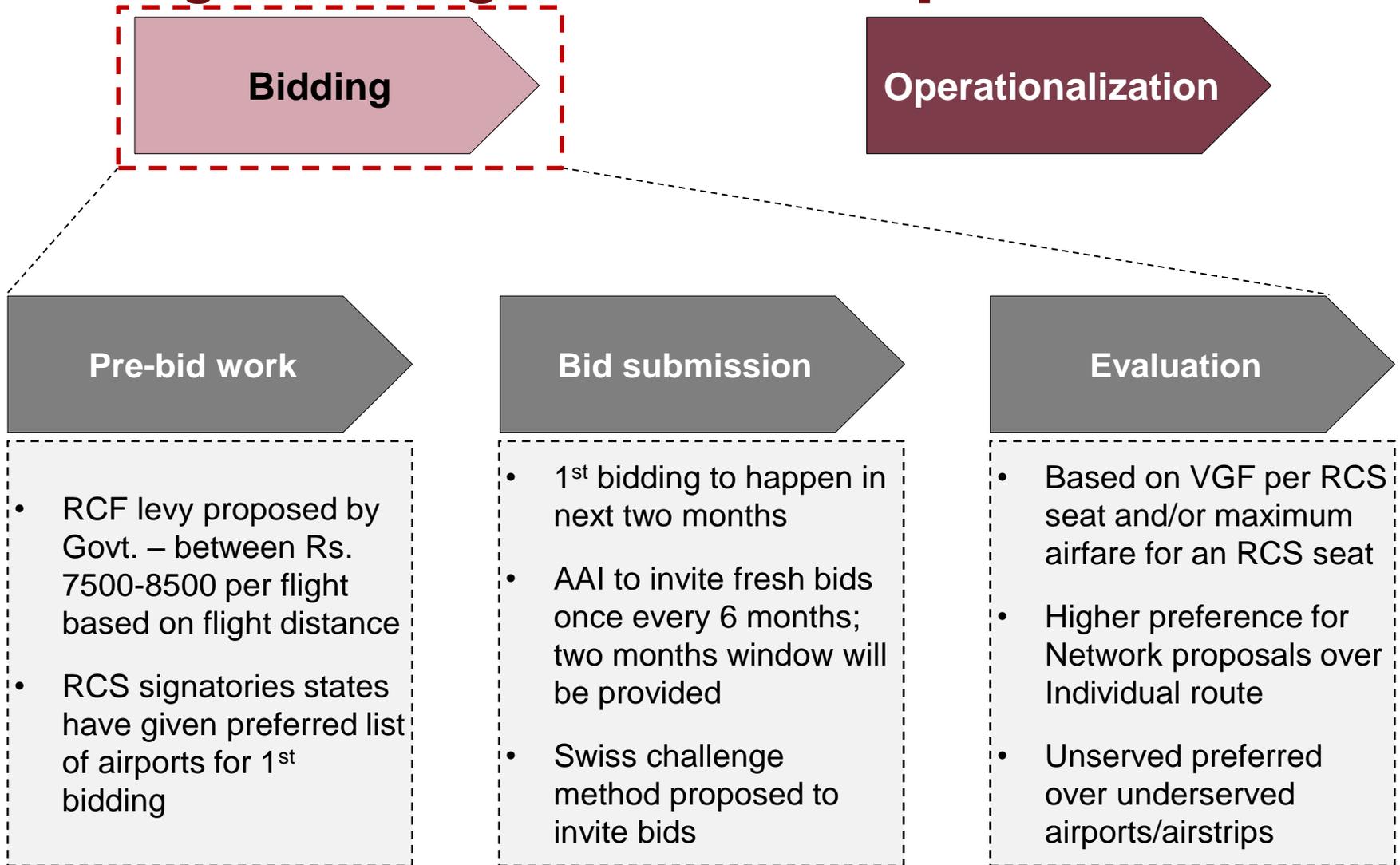


## Key features

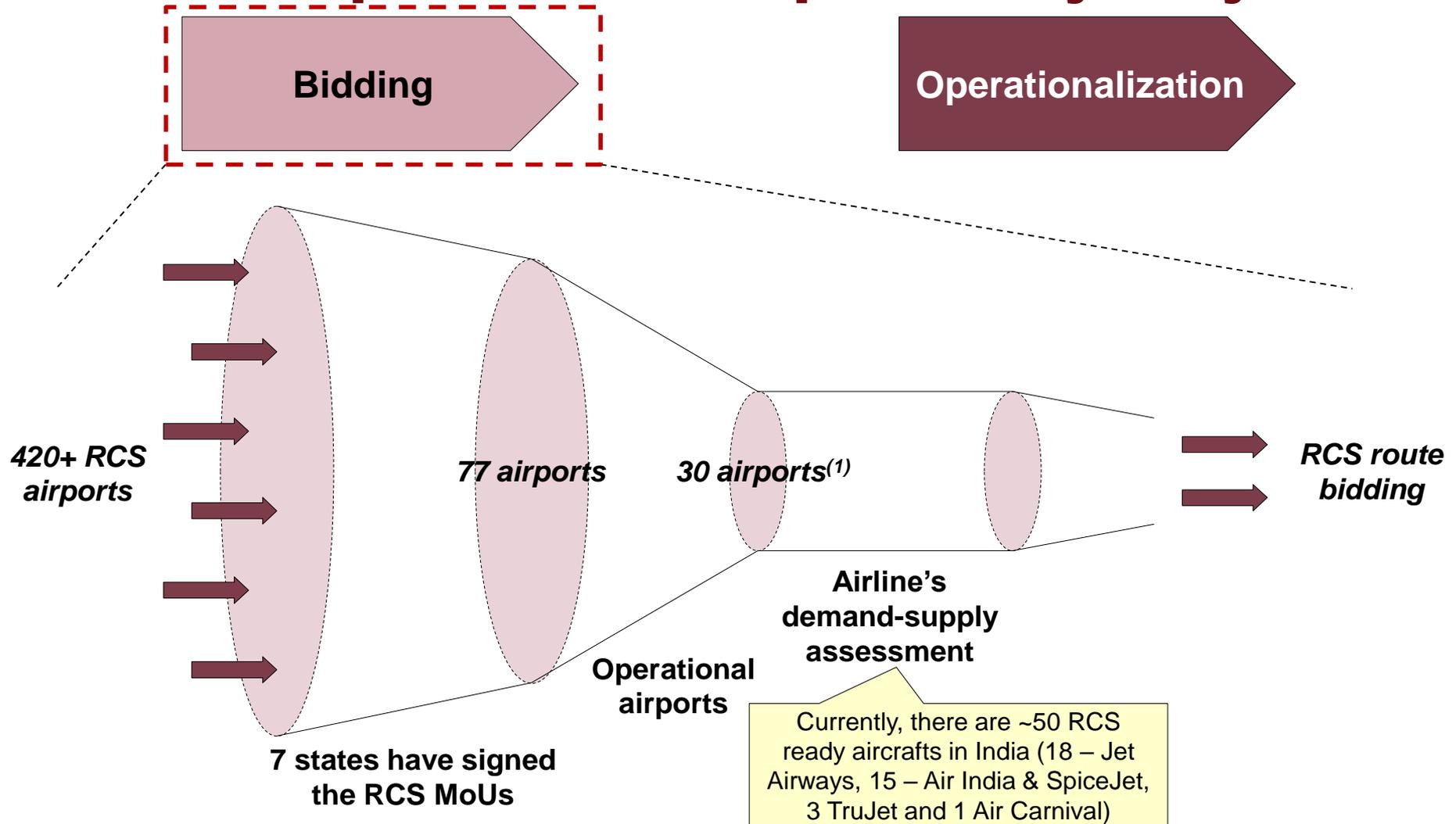
- Introduction of regional connectivity scheme
- Change in 5/20 rule to remove constraint of number of years before flying international
- Integration of Civil aviation policy with “Make in India” and other Skill development policies

**RCS is seeing good traction with 7 states - Maharashtra, Gujarat, Andhra Pradesh, Chhattisgarh, Jharkhand, Puducherry and Manipur already signed up for the scheme.**

# Going forward, the RCS policy requires immediate focus on bidding and a long term focus on operationalization.



# Being the 1<sup>st</sup> bid, airlines will avoid external uncertainties and bid for airports which are operationally ready.



<sup>(1)</sup> Of the 77 airports, only 30 airports are operational; 20 airports are non-operational; 27 airstrips with little information on operability

# Apart from the airlines, there are five key stakeholders required for successful operationalization of the scheme:



- 1 ATC/ANS
- 2 Airline Ground Staff
- 3 Airport Readiness
- 4 Security
- 5 Local Ecosystem

Critical Parameters for ensuring sustainable operations at an airport

1

# Significant shortage of ATC / ANS staff requires technology intervention and private sector participation.

Key Issue	Description	Suggestions
<b>Staff Shortage</b>	<ul style="list-style-type: none"> <li>Delhi &amp; Mumbai have ~60% of required air controllers</li> <li>Limited training facilities in the country; bound to create shortage of additional 1000 air controllers every year</li> <li>Locating dedicated ATC staff in remote locations</li> </ul>	<ul style="list-style-type: none"> <li>Increase training centres &amp; incentives to attract talent</li> <li>Involve private sector in ATC training – sub-contract or independent institutes</li> <li>Pvt. sector participation will require streamlining of training standards &amp; placement certainty</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li>Viability of building full-fledged ATC infrastructure for each RCS airport will be difficult</li> </ul>	<ul style="list-style-type: none"> <li>Explore remote ATC facilities, as currently operational in countries like Sweden, US, Norway, Australia, etc.</li> </ul>

2

## Greater collaboration between airlines and airport can ease availability of ground staff at remote locations.

Key Issue	Description	Suggestions
<b>Ground Handling staff</b>	<ul style="list-style-type: none"> <li>Initially, the RCS airports are expected to see 1-2 flights; or 100-150 passengers per day</li> <li>Airlines would require atleast 4-5 staff for ground activities</li> <li>Sub-optimal utilization; high costs</li> </ul>	<ul style="list-style-type: none"> <li>Collaboration between airlines and airport operator; cross-train staff to support both</li> <li>In case of multiple airlines operating at the airport, explore sharing resources for greater efficiency &amp; better economics</li> </ul>
<b>Pilots &amp; Cabin Crew</b>	<ul style="list-style-type: none"> <li>Sub-optimal utilization due to limited flights</li> <li>Readiness to fly to remote places</li> </ul>	<ul style="list-style-type: none"> <li>Route planning very important to ensure better cabin crew utilization</li> </ul>

3

## Clear guidelines for timelines & cost for availability of airport infrastructure will be critical.

Key Issue	Description	Suggestions
<b>Infrastructure readiness</b>	<ul style="list-style-type: none"> <li>Timelines &amp; cost implications for making airport RCS ready not clearly laid out</li> <li>Not clear if winning bidder will have to wait for airport to become operationally ready &amp; its cost implications</li> </ul>	<ul style="list-style-type: none"> <li>Standardize minimum facility standards &amp; corresponding development plan (time &amp; cost)</li> <li>States can specify airports which are operationally ready &amp; invite bids only for them for 1<sup>st</sup> phase</li> </ul>
<b>Airport Operation Staff</b>	<ul style="list-style-type: none"> <li>Difficult to find skilled manpower for airport operations &amp; maintenance in remote locations</li> </ul>	<ul style="list-style-type: none"> <li>Lay down minimum skill-sets &amp; staff requirement for handling airport operations effectively &amp; sustainably</li> <li>Invite private sector participation to provide standardized solution</li> </ul>

4

## Better planning, technology and privatization can help resolve significant security challenges at RCS airports.

Key Issue	Description	Suggestions
<b>Ensuring effective landside &amp; airside security</b>	<ul style="list-style-type: none"> <li>Operating hours of RCS airports will be limited, security will still be required 24X7</li> <li>Challenges in fencing boundary; prohibitive costs of security equipment</li> </ul>	<ul style="list-style-type: none"> <li>Can explore keeping minimal security during non-working hours</li> <li>Infrastructure planning to involve fencing of airside; can consider automated solutions</li> </ul>
<b>Security Staff</b>	<ul style="list-style-type: none"> <li>Smaller airports would also require at least 15-20 security personnel</li> <li>CISF already stretched in ensuring safety of assets of national importance</li> </ul>	<ul style="list-style-type: none"> <li>Plan airport infrastructure to minimize entry/exit points to optimize security personnel</li> <li>Explore involvement of private agencies, with detailed scrutiny, to perform non-core security functions</li> </ul>

5

**Lastly, on-boarding the local support ecosystem will be critical for on-ground implementation.**

Key Issue	Description	Suggestions
<b>Ticketing agents</b>	<ul style="list-style-type: none"> <li>• Access to large ticketing booking platforms can be a challenge for pure-play regional airlines</li> <li>• Lack of awareness can hamper utilization and demand pick-up</li> </ul>	<ul style="list-style-type: none"> <li>• Involvement of local ticketing agents to create awareness in the immediate catchment area</li> <li>• Creation of a common ticketing platform across all regional airlines</li> </ul>
<b>Surface transport</b>	<ul style="list-style-type: none"> <li>• Availability of adequate surface transport facilities</li> <li>• Radio taxis may be unavailable at the RCS locations</li> </ul>	<ul style="list-style-type: none"> <li>• Involvement of local transportation options, including buses, rickshaws</li> </ul>

# To summarize - greater stakeholder involvement and innovative solutions will be critical to the success of RCS.

## *Bid management*

- The most critical element for success of RCS is the airline participation
- Therefore, a transparent and efficient process will need to be run
  - Minimize information asymmetry regarding operational airports
  - Define clear timelines for bid evaluation, Swiss challenge and closure
  - Fast-track onboarding of additional states as RCS signatories

## *Stakeholder involvement*

- A sustainable revenue model for airport operators will need to be developed
- Need for greater load sharing with private players in ATC / ANS, security, airport operations, etc.
- Greater involvement of local stakeholders – ticketing agents, baggage handlers, perimeter security

## *Innovative solutions*

- Greater use of technology to solve key issues, e.g. remote ATC / ANS through cameras, pre-fab airport terminals, etc.
- Cross-training of ground staff to handle multiple functions (baggage, check-in counters, etc.)
- Creation of a shared ticketing platform across multiple RCS airlines / routes

**The Regional Connectivity Scheme is a much needed positive initiative towards making flying accessible and affordable for large parts of the country, which are not connected today.**

**Thank You**