

Airport Planning Process

Capacity Planning at Schiphol An Airline Perspective

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The planning process: Necessity

Parties concerned (AAS, LVNL & KLM) need a vision to:

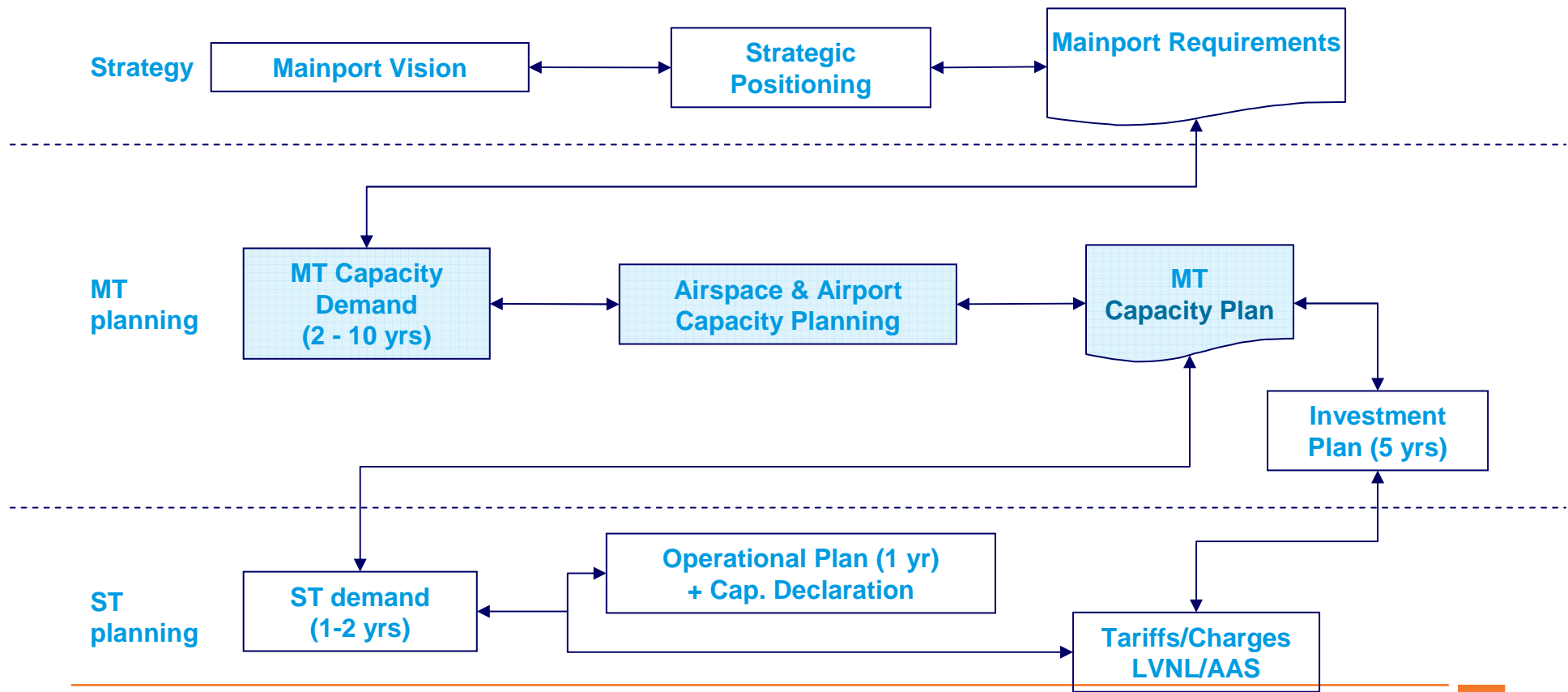
1. Find solutions for capacity issues in a constrained environment
2. Prevent uncoordinated decisions on capacity issues
3. Overcome differences in vision on capacity issues (often caused by financial policy)

AAS, LVNL & KLM agreed to develop a capacity planning process for Airport & Airspace Capacity

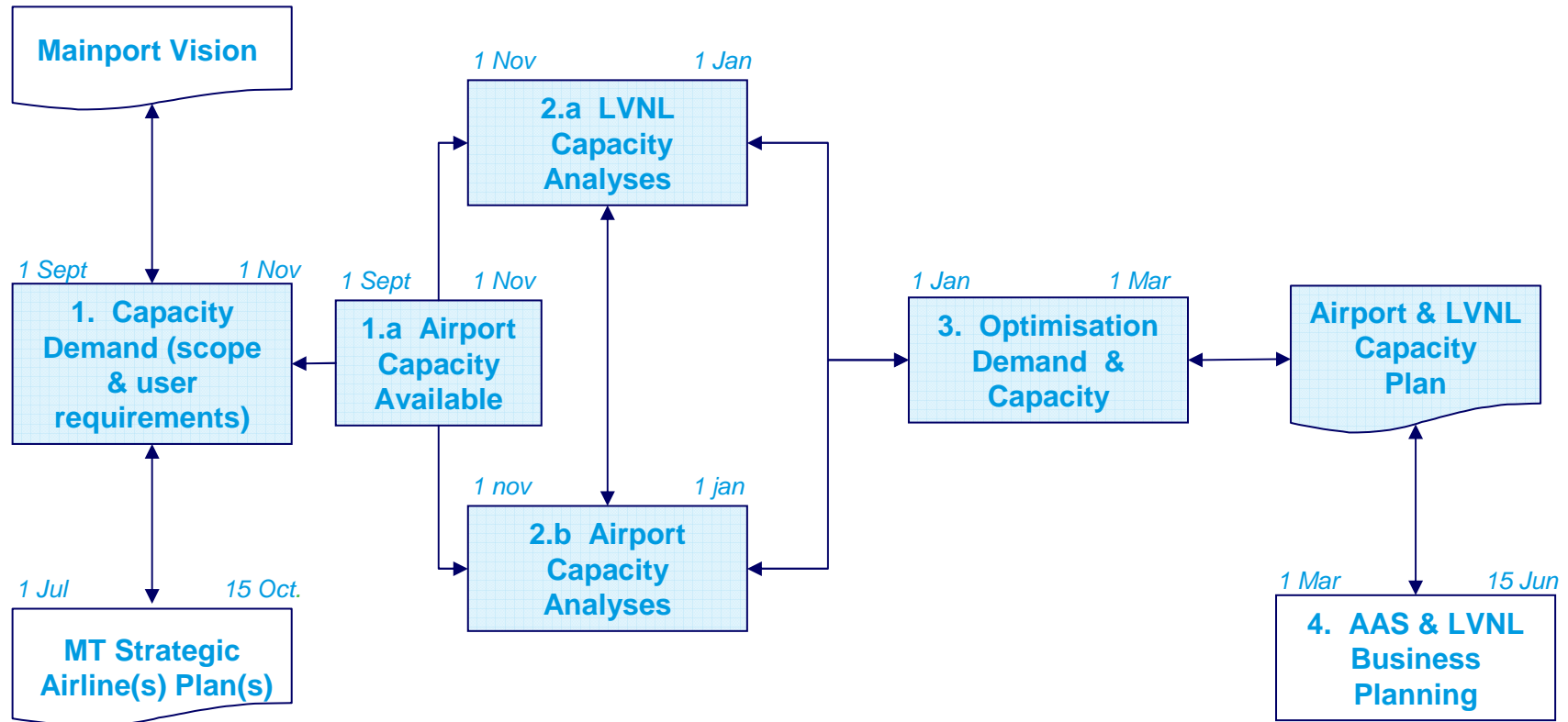
- Focus on 5 year planning within longer term vision
- Integration with existing processes (airport charges consultation, business planning etc)
- Parties keep their own responsibilities

The planning process: 3 Phases

from Mainport strategy via capacity planning to operational plan & tariffs\charges



The planning process: Primary steps



The planning process: Fundamentals

Evaluation (previous Summer and Winter Periods)

Policy on:

- 1. Social capacity*
- 2. Safety & environment*
- 3. Security & border control*

Availability of:

- 1. Runways, taxiways, manoeuvring area*
- 2. Stands & gates*
- 3. Terminal*
- 4. Baggage*
- 5. Commercial activities*
- 6. Cargo*
- 7. Accessibility*
- 8. Real Estate development*
- 9. Maintenance*
- 10. Overview of running projects/investments*

The planning process: 4 steps

1. Capacity Demand: Scope & User Requirements

- Scope: economic projections, market developments, fleet renewal, growth predictions (high & low) of traffic at Schiphol.
 - User requirements: necessary peak capacity, sustained capacity, MCT's, cost levels, etc. (*see information details*)
- PM: To support the above, schedules & or key figures are calculated for certain key years

2. Analysis of Available Capacity

- Evaluation of the capacity situation

3. Optimisation Demand v Capacity

- Develop and evaluate possible solutions
- Or, as a last resort, adapt user requirements, forecasts or schedules

4. AAS & LVNL Business Planning

- For internal use
- For consultation with: Government, IATA etc.

The planning process: Information Details

Requirements LVNL

- Annual Capacity
- Runway Capacity
 - Inbound peak (mvts/hour)
 - Outbound peak (mvts/hour)
 - Off Peak (mvts/hour)
 - Early Morning 06:00-07:00 (mvts/hour)
 - Night (mvts/hour)
- Sustainability
- Firebreaks
- General Aviation Quotum
- Cross Wind Criteria
- Runway maintenance
- Runway Preferences
- Routes (SIDs/STARs)

Requirements Airport Authorities

- Peak demand is related to runway capacity.
- **Baggage Flow**
 - Check-in capacity
 - Transfer sorting capacity
 - Reclaim capacity
- **Passenger Flow**
 - Check-in capaciteit
 - Check in (SSCI / conventional)
 - Drop off points
 - Border Filters
 - Security filters
 - (non)Schengen filters.
 - Lounges
 - Busgates.
- **Aircraft Flow**
 - Gates
 - Divided into categories and status; S/NS - hydrant/non hydrant
 - Aircraft stands
 - Divided into categories

Results for the aviation sector

1. Airport Capacity Plan

AAS planning for the next 5 years (year by year)

2. Airport Investment Program

Investments for the next 5 years

3. Operational plan

LVNL – AAS plan to maximize environmental capacity

4. Consultation documents

Basis for the Airport Charges proposals by AAS

Critical notes

- AAS does not have a CAPEX plan
- Airline parameters are not shared with other parties, like:
 - seasonal- load/transfer factors ICA/EUR
 - maintenance & a/c for back-up
- AAS has more information on other carriers than KLM causing the scenario's to differ
- Projections mostly conservative for political reasons
- Difference of opinion in choice of solution for certain capacity constraints
- Deliverables (both airline & airport) too late to be able to start an iteration process which could give airlines possibility to weigh pro's & con's of the proposals. After all, airlines must be able to estimate the impact of the ACP on costs, operation, schedules etc.
E.g. the ACP arrives in April & has to be finalised end of May
- Airport Investment Program published in August, should be a reflection of the investments mentioned in the ACP. However due to a time lapse, new insights cause differences, making the ACP partly outdated

Discussion

By giving all this information & by having an agreed planning process, both the airport & ATC can say they do everything to involve the airlines. **So what is your problem?**

1. However, due to time constraints & internal planning processes, the purpose of the sector planning process is only partly met.
2. Airlines are still faced with issues which are not entirely or completely in accordance with their views.
3. Airlines are still confronted with investments which cannot be traced back completely in the ACP & therefore are not equally comprehensible

In short: a lot of information is not the key to a successful cooperation



- **Adopt a 3 step planning process & undertake annually!**
 1. **Review demand**
 - ← Scope – economic projections, emerging trends, market developments, growth projections (high & low)
 - ← User requirements – fleet renewal, peak & sustained capacity requirements, MCT, etc.
 2. **Undertake an analysis of available capacity**
 - ← Determine subsystem capacity & potential bottlenecks
 3. **Optimise Demand v Capacity**
 - ← Develop & evaluate possible solutions
 - ← Or, as a last resort, adapt user requirements, forecasts or schedules
- **Result – for the airlines & airport authority**
 - ← An agreed 5 year rolling airport capacity development plan

PS: IATA's "CIP Engagement Process - Best Practice" has been developed on the KLM process outlined