



ATS Staff Calculation

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The Other Big Question

The other big question for many African ANSPs today is:

How many ATCs do I need?

Associated questions:

- Do I have enough ATCs?
- For what?
- *Some days we have enough, other days we don't. What is going on?*
- *The ATCs are driving me crazy...*

So, how many ATCs do we need?

- To do what?
- Quantify the requirement for labour
 - Per sector / service
 - Determine an annual summary of services demanded
- Quantify the supply of labour
 - “Real” ATC staff availability
- Match requirement for labour with supply of labour
- Demand / Supply Balancing

Strategic Workforce Planning: Demand

The loneliest tower in the world...

- Hours of duty: 09: 00 to 10:00 daily (1 shift)
- Days of the year: 365
- How many shifts does this tower cover in a year?

365 shifts

Strategic Workforce Planning: Demand

- Building on 1 service per day = 365 shifts

Service type	Shifts / day	Shifts / year
1 service / position	1	365
2 service / position	2	730
3 service / position	3	1,095

Strategic Workforce Planning: Demand

Control service type	From	To	Duration	Shifts / day	Shifts / year
Aerodrome	8	20	12	2	730
Approach	0	24	24	3	1,095
Area	0	24	24	3	1,095
... (Fatigue) ...	xx	xx	xx	xx	
... (other) ...					
Supervisor	8	20	12	2	730
Safety specialist	8	16	8	1	365
Total				11	4,015

Strategic Workforce Planning: Supply

- Full year's employment
- Defined absences
 - Predictable absences
 - Leave
 - Training
 - Other known activities
 - Unpredictable
 - Sick leave
 - Family responsibility
 - Other
- Available supply of labour

Strategic Workforce Planning: Supply

Aspect: Predictable absences	Per year	Effect
Full year		365
Off days (2 days per week)	104	261
Vacation Leave per year	25	236
Continuation Training per year	15	221
Other training days	5	216
Other commitments	16	200
Total Predictable Absences	165	200

Strategic Workforce Planning: Supply

Aspect: Unpredictable absences	Per year	Effect
Total Predictable Absences	0	200
Family Responsibility Leave	5	195
Maternity Leave	5	190
Unpaid Leave	2	188
Relocation Leave	5	183
Sick Leave	10	173
Special Leave	3	170
Study Leave	5	165

Strategic Workforce Planning: Solution

Match requirement for labour with supply of labour:

Demand	4,015
Supply	165
Staff required (Demand ÷ Supply)	24.3
Rounded	25

Staff calculation exercises

Strategic Workforce Solution

- Attrition rate
 - Resignation
 - Retirement
 - Other
- Impact of staff shortage on business
- “Just-in-time” staff readiness
- Training planning
 - Rating Training
 - Validation Training



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