Dear Reader,

As the holder of the operating licence awarded by the Swiss Confederation, Flughafen Zürich AG has a duty to meet the demand for direct flights to the world’s major cities. Along with the numerous restrictions imposed, the sheer complexity of coordinating take-offs and landings poses a major challenge, both to Flughafen Zürich AG and to the airlines that serve the airport. We therefore welcome that an agreement has been reached between Germany and Switzerland on an international treaty, as it has removed a great deal of the uncertainty regarding our future.

The treaty represents a compromise: while on the one hand, we might have wished for more concessions from the German side, on the other hand the new treaty finally establishes a secure legal foundation for planning and investment. The waiving of any restriction on the number of flight movements also offers some scope for moderate development of Zurich Airport in future. Consequently, Flughafen Zürich AG will vigorously support the ratification of this treaty. From an operational point of view, however, the treaty can only be implemented in conjunction with the extension of runways 10/28 and 14/32. Adoption of the curved northern approach route is also vital to the treaty’s implementation. In this edition of our Political Newsletter we will therefore examine these operational issues and challenges in detail.

A further key topic is the renovation of runway 14/32. After 35 years of service, this runway is approaching the end of its design life and, along with the runway lighting, must be completely replaced. Although the main reconstruction work is not scheduled until 2014, the initial preparatory work is already underway.

In this issue we hand over our guest column to René Huber, Mayor of the airport’s home town of Kloten. He describes with great insight how closely the fortunes of the municipality of Kloten and those of Zurich Airport are intertwined, and how he as Mayor has managed to reconcile the conflict he has felt at times between aircraft noise on the one hand and commercial success on the other.

Finally, I would like to draw your attention to the infrastructure report published by economiesuisse at the beginning of July. For the Swiss Business Federation it is obvious that Switzerland cannot sustain its attractiveness as a place to do business in the long term without well-maintained and functioning infrastructures. The report makes this crystal clear.

As you will see, our newsletter is once again addressing some key issues. I would like to thank you for your interest in Zurich Airport and wish you a stimulating read!

Thomas E. Kern
Chief Executive Officer
Treaty with Germany – a sensible compromise

At the beginning of July 2012, Swiss Federal Councillor Doris Leuthard presented the new treaty with Germany. Taking an important step forward to end the long-running dispute with Germany over aircraft noise, the treaty represents a compromise: despite the further curtailment of the approach from the north, which will rule out the ideal operating concept, comprises one major advantage – Germany has dropped its threatened restriction on the number of flights using the northern approach routes, which consequently allows moderate growth. Moreover, runway extensions minimise capacity restrictions. From an operational point of view, therefore, Zurich Airport supports the ratification of this new treaty.

The treaty is by no means perfect, one would liked to have seen more concessions from the German side. However, it is clear that both sides had to concede ground and so a compromise was struck which confers several operational benefits over the treaty of 2001 and the Stuttgart Declaration. Firstly, the treaty as negotiated does not restrict the number of flights. This is absolutely essential to enable at least some modest growth of Zurich Airport in the future. Secondly, as it cannot be terminated until 2030 at the earliest, the treaty creates a clear framework and consequently provides the vital planning, legal and investment security for the airport and its neighbouring municipalities. Thirdly, it averts the danger of any further tightening of the current unilateral German Executive Order (DVO).

Implementation necessitates runway extensions
Implementation of the treaty brings a large number of operational challenges. The complexity of flight operations and the fact that the airport is already stretched at peak times means that, operationally speaking, the treaty can only be implemented if certain runways are extended and if a curved northern approach route is adopted. The extension of runway 10/28 towards the west is necessary to enable large and heavy aircraft to land on it in adverse weather conditions. The extension of runway 14/32 towards the north is needed so that all aircraft, including heavy long-haul jets, can take off from this runway in a northerly direction. It is only possible to operate two independent runways with the “East Concept”, i.e. take-offs towards the north in conjunction with landings from the east (see Figure 1). The operation of two independent runways plus even better separation of take-off and approach routes in the air are key requirements for ensuring that the airport’s capacity can be maintained on a par with current levels (around 66 flight movements per hour) after the treaty has been implemented, and that it can therefore more or less keep up with demand.

Without extended runways, treaty will cut capacity
The treaty will enter into force even if the runways cannot be extended. If an aircraft cannot land on runway 28 from the east because the runway is not long enough, it will take the southern approach and land on runway 34. Air traffic control would then have to rearrange flights accordingly, which would considerably reduce capacity. Because of the way international flights are coordinated, if a number of such reroutings were necessary every day, the airport would no longer be able to satisfy the demand for slots at key peak periods.

Operating concepts and capacities.
1 Runway only usable for all aircraft types if strong headwind
Red = take-offs, blue = landings, dotted = go-arounds
Source: Flughafen Zürich AG
The consequences are obvious: Zurich Airport would no longer be competitive and would cease to be attractive, and many intercontinental flights would be withdrawn as they would no longer be viable in the long term. This would diminish the attractiveness of Switzerland as a destination, and so be bound to have a significant impact on economic growth and the prosperity of Switzerland generally.

Curved northern approach reduces number of people affected by noise
To ensure that as few people as possible are affected by noise, and that flights are not routed over residential areas to the east of the airport in both the morning and the evening, a curved northern approach route will be developed by 2020. This route will be based on the latest technical findings and will provide an alternative to the existing southern approach routes. Together with extended runways used in conjunction with the East Concept (see Figure 2) in the evening, the implementation of satellite-based technology for the curved northern approach route between 6 a.m. and 6.30 a.m. will mean that fewer people than at present will be affected by aircraft noise. In addition, this operating concept will not significantly reduce the current capacity, and will enable the airport to meet at least some of the steadily rising demand.

No alternative to treaty
For the above operational reasons, Zurich Airport is in favour of ratification of the new treaty and the resulting runway extensions. Only a long-term treaty can provide the necessary planning, legal and investment security for the airport and its neighbouring municipalities. As a country with a high level of exports and a relatively small domestic market, Switzerland is dependent on reliable access to international markets. The airport plays a vital role here as a hub for passenger transport and air freight. An intercontinental airport with at least some development potential is essential for Switzerland if it is to meet the steadily rising demand to some extent. Thus, there is no alternative to the present treaty as it stands.

**Figure 2**

<table>
<thead>
<tr>
<th>Time</th>
<th>Current operating concept</th>
<th>Variant J of treaty (from 2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mon–Fri</td>
<td>Sat/Sun + public hols</td>
</tr>
<tr>
<td>06.00–08.00</td>
<td>South Concept</td>
<td>South Concept</td>
</tr>
<tr>
<td>08.00–10.00</td>
<td>South Concept</td>
<td>North Concept</td>
</tr>
<tr>
<td>10.00–12.00</td>
<td>North Concept</td>
<td>North Concept</td>
</tr>
<tr>
<td>12.00–14.00</td>
<td>North Concept</td>
<td>North Concept</td>
</tr>
<tr>
<td>14.00–16.00</td>
<td>North Concept</td>
<td>North Concept</td>
</tr>
<tr>
<td>16.00–18.00</td>
<td>North Concept</td>
<td>East Concept</td>
</tr>
<tr>
<td>18.00–20.00</td>
<td>East Concept</td>
<td>East Concept</td>
</tr>
<tr>
<td>20.00–22.00</td>
<td>East Concept</td>
<td>East Concept</td>
</tr>
<tr>
<td>22.00–23.30</td>
<td>East Concept</td>
<td>East Concept</td>
</tr>
</tbody>
</table>

1 South Concept: In the event of north east wind and poor visibility, and for some intercontinental landings
2 South Concept: In the event of north east wind and poor visibility

Operating concepts today and from 2020.
Source: Flughafen Zürich AG
economiesuisse calls for greater competition and cost transparency in infrastructure policy

Efficient infrastructures facilitate the transportation of goods, people, information and energy and are consequently a fundamental prerequisite for the success of a society and its economy. On 2 July 2012, economiesuisse, the Swiss Business Federation, published its latest infrastructure report. Along with an analysis of the status quo, it calls for action by policymakers.

1. The Swiss aviation industry needs a level playing field with international competition

Policymakers must ensure that Swiss aviation can continue to compete within a favourable regulatory environment, in particular in terms of capacities, charges, taxes and operating hours. The industry must continue to be structured in future in such a way that it can survive in the highly competitive international market, and so safeguard Switzerland’s access to European and intercontinental business centres.

2. Both private and public solutions are needed

Air traffic control and airports should be financed by the aviation sector itself. However, anti-terrorism and national security measures should be financed from the public purse.

The economiesuisse report points out that, without well maintained and functioning infrastructures, Switzerland cannot expect to maintain its attractiveness as a place to do business in the long term. While economiesuisse is calling for long-term finance, private initiatives and efficiency for other infrastructure sectors such as road/rail and postal services, to a large extent these have already been put in place by the aviation industry. Aviation has been deregulated for a number of years already and is highly efficient and competitive today. This competitiveness is by no means guaranteed, however, and it must not be jeopardised by the imposition of unilateral national restrictions. Operating as they do in an extremely tough European market, airports must also be able to grow in line with demand in future. economiesuisse has therefore called for action in the aviation sector too:

economiesuisse’s infrastructure report (in German and French only) can be downloaded from: http://www.economiesuisse.ch/de/themen/inf
Of eggs and baskets

The fortunes of the municipality of Kloten and Zurich Airport are closely bound up with one another. The majority of the airport site, especially the main airport complex and most of the hangars, falls within Kloten’s boundaries. By virtue of its proximity, the airport is also a major local employer and a source of contracts for firms in the town. As a result, both local government revenues and the majority of residents and commercial activities are directly dependent on the airport.

In my many years working in an executive capacity for the municipality of Kloten, I have experienced the highs and lows of the aviation industry and their impact on the town at first hand: the rapid expansion of the nineties, the crisis at the beginning of the new millennium following the grounding of Swissair, and the welcome steady recovery over recent years. They all clearly demonstrate that the prosperity of Kloten is directly dependent on the economic success of Switzerland’s largest airport. Its influence is enormous. The airport’s presence means that the number of jobs here greatly exceeds the number of residents. Our share of corporate taxes is far ahead of other comparably sized communities in the Canton of Zurich. For many years Flughafen Zürich AG has been our biggest taxpayer. This does however mean that we are also at risk of putting all our economic eggs in one basket. If airport-related revenues were to fall and jobs were lost, we would very quickly see a sharp rise in our welfare costs. We would have very little scope to influence other expenditure such as administrative and infrastructure costs, and none at all as regards payments to the ZVV Zurich Transport Network. Taxes would then have to be increased, and key municipal projects deferred. I therefore think it is extremely important that the airport should continue to enjoy a favourable regulatory environment in future. The current debate about aircraft noise and its distribution also forms part of this.

Increasing dependency

Virtually every company in Kloten is dependent on a well functioning airport – either as a source of contracts or as a provider of excellent intercontinental connections, since the availability of the latter greatly influences multinational companies when they are choosing business locations. Attempts to mitigate the risk of placing all our eggs in this one basket have, however, generally foun dered. I can cite one very good example: a number of years ago I congratulated myself on getting a medium-sized enterprise, operating in a field unrelated to the airport, to set up here. When I visited this firm again recently, the owner proudly announced that he was now also supplying companies at the airport and they were accounting for a steadily increasing share of sales ...

Mutual understanding and tolerance are keys to success

Being Mayor of Kloten is a job unlike any other in Switzerland. The challenges are many and not without controversy. The interests of the town and its citizens on the one hand, and those of the airport with the many companies based there, and its efforts to meet the demand-led need for growth on the other hand, are not always one and the same. So in practice I am the mayor of two towns – and I would not like to be without either of them. I see it as my job to act as a mediator and to build mutual understanding. Both sides show great willingness and tolerance. This is the all-important key for future cooperation and the continued prosperity of Kloten and Zurich Airport.

René Huber
Mayor of Kloten
Runway 14/32 to undergo major renovation

Zurich Airport’s runway 14/32 was built in 1976 as part of the airport’s third expansion programme. It was designed to have a service life of 35 years.

35 years and over a million take-offs and landings have left their mark. The pavement surface shows visible signs of damage and the technical systems are outdated. Safe operation of the runway is therefore only possible with additional maintenance work costing some 3 million Swiss francs a year. The greatest wear and tear is evident on the 22.5 metre wide concrete slabs down the centreline along the entire length of the runway. The pavement is so badly damaged in this area that complete replacement is necessary. However, the runway foundations are still in good condition and do not need to be replaced.

Planning consent in place
Following a planning project, a planning application was submitted to the Confederation in May 2011. The communities that will be affected by construction noise were notified of the planned renovation work before the application was submitted. Planning consent was granted by the Department of the Environment, Transport, Energy and Communications on 16 April 2012.

Choosing the optimum renovation method
To establish the best way of carrying out the refurbishment, preliminary studies were conducted into a daytime repaving option (concrete construction with runway closure) and a night-time repaving option (asphalt without runway closure). Since the daytime option using concrete would require runway 14/32 to be completely closed for several months, this was rejected because of the resulting curtailment of flight operations.

New runway lighting
Along with the power supply system, the runway lighting likewise entered service back in 1976. All parts of this system are consequently old and showing signs of wear and tear. As part of the renovation of runway 14/32, the entire runway lighting system will therefore also be upgraded to bring it into line with modern safety and availability requirements.

Night-time repaving – a tried and tested method
Repaving the runway with asphalt during the night was the method previously used to renovate runway 16/34 between April and October 2008, and it proved to be very effective. It is therefore planned to upgrade the runway section by section during the night-time flight curfew period. The existing 30 cm thick concrete slabs along the centreline will be replaced by a multilayer asphalt pavement with a total thickness of 35 cm. Construction times will be the nights from Monday to Tuesday and from Friday to Saturday, ending at 6 a.m. in each case. The last hour between 6 and 7 a.m. is reserved for asphalt cooling, runway marking, handover and runway control.

Longer time window for construction work
The feasibility of using an extended construction window (beginning at 10 p.m. instead of 11.30 p.m.) was also investigated during the project planning stage. The
longer time window makes it possible to reduce the number of construction nights, which in turn enables the pavement renewal work to be completed within one season (2014). The earlier closure of runway 14/32 in the night from Monday to Tuesday and from Friday to Saturday also has a negligible impact on flight time-tables.

No noisy demolition work after midnight
Demolition work is particularly noisy, and building noise is perceived as extremely intrusive after midnight. Commencing work earlier at 10 p.m. will allow the noisy demolition work to be completed by midnight. This will keep the noise during the night to a minimum.

Preparatory work from June 2012
Work commenced on expanding the transformer substation already in June 2012 and will be completed by November this year. At the same time, the new empty conduits for the runway lighting cables will be produced from August 2012 to July 2013. Electrical expansion of the substation is required for installation of the new power supply and runway lighting control systems from November 2012.

Main runway construction work in 2014
The main work on the slabs along the centreline and the installation of the new lighting elements on the runway is scheduled to take place from March to October 2014. Around 75 nights will be required for this.

Optimised logistics
The large quantities of asphalt that will be required during the night will be delivered each evening prior to work commencing and will be temporarily stored in a thermally insulated hangar at the construction site near the fire drill ground. This will minimise the number of truck deliveries during the night. The excavated material will be temporarily stored at the construction site during the night and will not be removed from the airport until the following day.

Noise protection at construction site
Noise abatement measures at the construction site, such as mobile noise protection barriers, will reduce noise levels for nearby residents as far as possible. In addition, works-related traffic will not be routed through residential areas. Measurements will be taken to monitor noise emissions. A contact point will be set up to field questions and complaints from residents and to provide regular information updates for citizens and government agencies.

Renovation to be completed by 2014
The total costs of upgrading runway 14/32 amount to some 84 million Swiss francs. Following completion of the work in the autumn of 2014, runway 14/32 will be fit for another 30 years of service.
Traffic statistics

Traffic volumes
During the first six months of 2012, Zurich Airport was used by around 11.8 million passengers, up 3.1% compared with the first half of 2011. While the number of local passengers rose by 2.5% to 7.7 million, the volume of transfer passengers saw an even greater increase, by 4.4% to 4.1 million. In contrast to passenger numbers, flight movements fell by 3.1%, reflecting an increase in the number of passengers per flight and an improved seat load factor. The average number of passengers per passenger aircraft flight rose by 5.0% to 103.3. The seat load factor saw a year-on-year rise of 2.8% and now stands at 72.5%. Freight volumes remained largely stable at -0.3%.

Traffic volumes at Zurich Airport in 2012

<table>
<thead>
<tr>
<th></th>
<th>January-June 2012</th>
<th>January-June 2011</th>
<th>Change in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passengers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local passengers</td>
<td>7,671,754</td>
<td>7,486,551</td>
<td>2.5</td>
</tr>
<tr>
<td>Transfer passengers</td>
<td>4,096,486</td>
<td>3,925,674</td>
<td>4.4</td>
</tr>
<tr>
<td>Share of transfers</td>
<td>34.8%</td>
<td>34.4%</td>
<td>-0.4</td>
</tr>
<tr>
<td>Total passengers</td>
<td>11,813,710</td>
<td>11,457,331</td>
<td>3.1</td>
</tr>
<tr>
<td>Flight movements/freight/mail</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flight movements</td>
<td>133,973</td>
<td>138,085</td>
<td>-3.1</td>
</tr>
<tr>
<td>Freight (tonnes)</td>
<td>210,807</td>
<td>210,687</td>
<td>-0.3</td>
</tr>
<tr>
<td>Mail (tonnes)</td>
<td>17,681</td>
<td>15,628</td>
<td>13.1</td>
</tr>
</tbody>
</table>

Source: Flughafen Zürich AG

Vital hub for SWISS
55.9% of passengers who used Zurich Airport in 2011 flew in an aircraft operated by SWISS. This high percentage of SWISS passengers is because this airline operates a hub at Zurich Airport: many of its customers use the airport to transfer onto a connecting flight. These transfer passengers are necessary to enable us to offer a comprehensive network of direct flights to major cities all over the world. Without transfer passengers – and transfer freight – many direct flights would not be viable and would be dropped from the schedules sooner or later.

85 airlines
Although SWISS flies over half of all passengers travelling via Zurich Airport, it only accounts for 70 of the 196 destinations in 37 out of a total of 67 countries served by flights from Zurich. In addition to SWISS, 84 other airlines offer regular direct flights to and from Zurich Airport. The biggest airlines (by passenger share) operating at Zurich Airport are: airberlin, Air France, Austrian Airlines, British Airways, easyJet, Edelweiss Air, Emirates, Hello, KLM, Lufthansa, SAS, Singapore Airlines and TAP Air Portugal.