

Why Geneva is your best choice in Europe

Why are so many major ICT players choosing Geneva?

www.whygeneva.ch

We asked a few...

Expedia
Freescale
HighPoint Solutions
ICANN
ID Quantique
Internet Society
Silent Circle
SITA
STMicroelectronics
Thomson Reuters
Tidemark
WiSeKey



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OF GENEVA

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The new center

This is an exciting time to be in Geneva as it is growing as a global hub for ICT thinking.

Geneva is a long standing platform for global leaders, high level scientists and entrepreneurs. Home to numerous international organizations, Geneva features the center for global governance. Strategic developments in this respect include the newly established presence of ICANN, reinforcing Geneva’s role as the world’s capital of digital diplomacy. In the scientific field, next to world-class universities, two “big science” projects are located in Geneva: the CERN and the new-born Human Brain Project. In the economic field, Geneva is a leading place in many sectors, such as finance or life sciences.

This unique set of actors creates incredible opportunities for business and innovation. Indeed, Geneva’s often-overlooked asset is its

Why

ICT companies are gravitating towards Geneva – and for good reasons. Market opportunities, framework conditions and a unique network of academic and international institutions are indeed to be found here.

First, Geneva offers exceptional market opportunities. The region is a world’s leading place in many sectors, most notably banking and finance, commodity trading, international governance, life sciences or fine watchmaking and jewelry. All the companies active in these fields have one primary need in common: secure, efficient information and communication solutions.

Second, Geneva offers world-class framework conditions making it a great place to conduct business. Switzerland and Geneva share a long standing tradition of stability and neutrality. Moreover, Geneva is internationally praised for the quality of its communication and transport infrastructures, for its multicultural, multi-lingual and highly qualified workforce, for its business-friendly government, for the quality

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of ICT thinking

small size: people from different fields and origins actually, physically, meet and exchange. Within a surprisingly short stroll may be a future business partner, customer or someone with the solution to your problem. In Geneva, people are accessible – including members of government.

Furthermore, the fact that so many global actors chose to be located in Geneva is the best testimony of the exceptional framework conditions that this city offers. As a Minister of Security and Economy, I have a strong commitment to maintain and improve these conditions making use of unique synergies available in Geneva, the smallest of the large cities.

My job is to ensure the context of economic freedom, while protecting the social peace for which Geneva is also justly famous. And from now on, security also means security in cyberspace, protection of data, individual identity and privacy.



Mr. Pierre Maudet
Minister of Security and Economy
Republic and State of Geneva

ICT companies choose Geneva

of its legal framework (including the privacy laws) and for its very high quality of life.

Third, as the birthplace of the World Wide Web (born at CERN 25 years ago), Geneva has long been a center of ICT thinking and hosts a unique network of academic and international organizations active in this field. For instance, such organizations as the International Telecommunications Union (ITU), the World Intellectual Property Organization (WIPO) or the Internet Society are headquartered in Geneva. Geneva is also home to two “big science” projects: the Large Hadron Collider at CERN and the EU-sponsored Human Brain Project. Furthermore, Greater Geneva Area hosts more than twenty world-class schools and universities such as the University of Geneva and the Swiss Federal Institute of Technology in Lausanne (EPFL). These universities maintain strong ties with the industry, thus allowing a great potential for the knowledge and technology transfer.

Given these exceptional market opportunities, framework conditions and networks of academic and international institutions, it is no surprise

that ICT companies are increasingly attracted to Geneva. In Valérie Kirschmann’s opinion, Associate General Counsel and Senior Site Representative at Thomson Reuters, “Geneva offers real options. It’s not part of the EU so an office faces low bureaucracy. At the same time, Geneva offers great airport connections and every kind of infrastructure already in place.” Geneva is hence gradually considered to be the world capital for internet governance, cyber-security is said to rival someday Private Banking as a Geneva economic specialty, companies are moving their data centers here and more and more newcomers are joining the globally present companies and start-ups fresh out of the university already located here.

So where does one start if one is interested in joining the Geneva flow? “The Economic Development Office is the front door for any company interested in locating to Geneva,” says Daniel Loeffler, Director of the Geneva Economic Development Office. “We are especially eager to welcome high value-added activities that help the local economy develop over the long term and promote sustainable development in the canton.”

Silent Circle chooses Geneva for new headquarters, data center



Mike Janke and a Blackphone

The timing could hardly have been better. In October 2012, **Mike Janke launched Silent Circle** to offer encryption software for texts, emails, phone/video calls and Internet browsing. Although communications security was still struggling to get the attention, Mr. Janke and others felt it deserved. Less than one year later, Edward Snowden's revelations of widespread government surveillance sent a wake-up call across the planet.

"Yes, that did help us break through the apathy about security," says Mr. Janke. "We never expected to grow this fast."

Things are, indeed, moving fast at Silent Circle. Barely two years old, but already grown to US \$100 million, the company's story began with a phone call: Mike Janke, ex-Navy SEAL turned entrepreneur, wanted to know if Internet legend Phil Zimmermann would like to discuss a new, private, peer-to-peer communications system. Mr. Zimmermann, creator of the world's most widely used email encryption software, PGP, liked what he heard and called renowned computer security expert Jon Callas. The three co-founders, then, handpicked the other members of the start-up team, an unusual collection of cyber-security experts and

Special-Ops veterans, that Mike Janke calls "the Spartans, because we don't back down."

"We're coming from an environment of innovation, A+ talent, self-sufficiency and zero tolerance for bureaucracy," Mr. Janke adds. "We can produce groundbreaking innovation faster than the NSA can hold a budget meeting. It's not even a fair fight."

Mike Janke was recently in town to sign papers opening Silent Circle's new global headquarters and primary datacenter in Geneva. "We were here last year for Phil Zimmermann's induction into the Internet Hall of Fame," he explains, "and we said then that we would be back. Switzerland has the best privacy laws in the world."

"The best privacy laws in the world"

By the end of 2014, the company plans to grow to 300-400 employees, with 50 key finance, sales and legal personnel based in Geneva. The new headquarters is part of Silent Circle's push on the European Continent: early 2014, Silent Circle announced a strategic partnership with Dutch telecommunications company, KPN.

"Silent Circle does not collect or sell user-data so we couldn't partner with most phone companies, for whom monetization of customer data is Priority Number One", says Mr. Janke. "But Carlos Slim, CEO of América Móvil, and Eelco Blok, CEO of KPN, are shaking up the telecom world: KPN will be the first 'privacy telecom'."

The deal offers Silent Circle KPN's 44.5 million subscribers in the Netherlands, Germany and

A different type of ecosystem

- Security applications for mobile and desktop: Silent Phone, Silent Text, Silent Contact
- First secure smartphone: Blackphone
- First secure, global, long-distance calling plans to 120 countries

Belgium; in return, KPN gets exclusive distribution in that market of Silent Circle's new Blackphone, the world's first privacy-focused smartphone. Named "Best Phone" at this year's Mobile World Congress, Blackphone retains minimal data: no name can be tied to any phone number. "Even if a government asks, there is nothing we can comply with," says Mike Janke. Manufactured jointly with the Spanish start-up GeeksPhone, the first series sold out in pre-orders before it could even ship. Mike Janke says that the new phone, a secure version of Android called PrivatOS, is also powerful: it transfers files up to 100MB in size over text.

Now, Silent Circle wants to solve the security problems of email, developed 40 years ago and which Phil Zimmermann calls "hopelessly broken." With Lavabit, the email service famously used by Edward Snowden, Silent Circle has created the Dark Mail Technical Alliance. Last year, both companies killed their own email systems, after Lavabit was forced to hand over its encryption keys to the NSA. Dark Mail, Mike Janke says, is their comeback: a 3.0 email service with no centralized repository for encryption keys, that promises to protect both users' data and meta-data*. The Dark Mail Technical Alliance says the new system will be ready in 2015.

Asked about the obvious misuses of privacy, Mike Janke counters that we need to accept that the world of global communications has grown up.

"Silent Circle is politically and religiously agnostic", he says. "We serve Fortune 500 companies, governments – including parts of the US & EU governments: the world's governments have their own BYOB** issues, same as anybody else – NGOs, journalists, international organizations, dissidents, and, yes, probably some bad people, too. You can't have it both ways. We create technology that fits today's world, a different type of ecosystem built upon user-control, security and privacy."

www.silentcircle.com
www.blackphone.ch

* Meta-data is the information contained in an email's "to" and "from", IP addresses, etc. Current email provides some protection of user data (addresses, messages inside your emails) but continues to leak metadata.

**BYOB, for 'Bring Your Own Devices': employees using their own computers and smartphones at work, potentially creating a security risk for employers.



HighPoint Solutions covers the details for pharma



Arnab Sikder,
Senior Vice President
and General Manager

HighPoint Solutions, a management consulting and specialized IT consulting firm, chose Geneva for its European Headquarters in response to its clients and partners in the European life sciences and healthcare markets.

“There are nuances in the European market”, explains **Arnab Sikder, Senior Vice President and General Manager, European Operations**. “We understood the market at a high level, but we needed the local level, too. It’s in the details where we are valuable, so we need local geography and local talent.”

“We needed the local level”

HighPoint began working globally in 2009 and started thinking seriously about a European headquarters in 2012. “Switzerland was a good option because of the number of pharma companies with HQs or affiliates of Japanese and US firms”, Mr. Sikder says. “Then, the Lake Geneva Region is a great market and holds a strong geographical position. And we explored Geneva off the bat because we knew local individuals and because we found the cantonal government open and supportive. It was an easy narrow.”

For now, the Geneva headquarters concentrates on four areas in business domain consulting for pharmaceutical and medical device companies: Sales & Marketing, Pricing & Contracting, Clinical Operations, and Regulatory & Compliance. “Right now, our energy is focused on current clients, to provide their over-expectations of our services”, says Arnab Sikder.

www.highpoint-solutions.com

Tidemark wants to transform business



Jérôme Lefebvre
Vice-President EMEA

Tidemark, founded by serial tech entrepreneur Christian Gheorghe, has joined Geneva’s growing ICT cluster. “Tidemark chose Geneva as its headquarters because the city is at the crossroads of Europe, welcomes high-tech companies and, last but not least, offers great quality of life for employees”, says **Jérôme Lefebvre, Vice-President, EMEA**.

Forbes has called Tidemark’s analytic software “visionary” for being mobile, highly-intuitive and visual. Tidemark itself says its cloud-based enterprise analytics will “engage every decision maker from finance to operations to business line managers with better data, deeper analysis and a richer experience.”

“We help both SMEs and large companies spread their estimates across all modern tools, from the tablet to Internet browser”, says Mr. Lefebvre. “Our activities in Geneva include marketing our solutions to improve company performance. Tidemark will soon be ten mobile employees addressing the entire European region.”

The company chose Geneva, he adds, because “Switzerland is the ideal country to establish a beachhead and Geneva is the ideal place in Switzerland.”

www.tidemark.com

Three start-ups redefine social networking

Three new social networks based in Geneva are bringing technology together with some fresh ideas.



“Do good & share it”

The founders of **Goodwall** believe that stories inspire and motivate individuals to take action. The Geneva-based startup’s goal is to incite people to work together on concrete projects and build long-term relationships through its humanitarian and environmental social network. Meant for all ages, Goodwall is especially attractive to students: each participant on the free platform is encouraged to build a “humanitarian CV” of accomplishments and experiences in social issues. Two years in preparation and after 1.1 million CHF in fundraising, Goodwall won the “People’s Choice Award” at Alp ICT’s Venture Night 2014.

www.goodwall.org

“Social network for politicians”

In the face of voter weariness, **GovFaces** offers a simple, two-way communication channel between citizens and the people they elect. Anyone who joins this free service can post a message for individual political leaders – and get a personal response. For politicians, GovFaces offers an excellent way to address issues and stay in touch with the electorate. In its first phase, GovFaces is concentrating on the European Parliament, but the start-up’s ambition is to bring its vision of “21st Century politics” to governments all over the world. Currently in French, English and Spanish, GovFaces intends to offer all 25 languages of the EU.

www.govfaces.com

“A new Internet philosophy”

Horyou is a new online platform where “noble ideals become actions, and where social networking is at the service of all.” Horyou puts the emphasis on sharing – knowledge, experiences, common interests, causes, projects, actions of solidarity – across generations, offering ways to support and promote initiatives at all levels. “We invite all personalities, organizations, and internet users passionate about their projects, actions, and ideas to be part of our platform and promote a new Internet philosophy”, says Yonathan Parienti, CEO. In its first stage, the platform is available in English, Spanish, Portuguese and French.

www.horyou.com



How to gain global leverage with a Geneva HQ

Expedia's Lodging Partner Services



When scouring the Internet for a hotel, you may have used Expedia without ever reflecting that the online travel agency is, in fact, an information technology company. But Expedia, born at Microsoft, in the early days of ICT, makes this point clear in its mission statement: “Expedia revolutionizes travel through the power of technology.”

“We use technology at scale to make travel more accessible to the public and offer services to our hotel partners”, explains **Cyril Ranque, Senior Vice President, Global Market Management.**

From its headquarters in Geneva, the Expedia Lodging Partner Services division manages a network of relationships with partner hotels across the globe. “Tech companies like ours are increasingly relevant for hotels”, Mr. Ranque explains. “We help our partners to be present in the global travel market without investment – and that gives huge leverage in the travel business.”

One of Expedia's strong points is to pool the value of its many individual brands into “collective intelligence.” Over the years, it has diversified from an online reservation system, to creating its own travel experiences across markets, to selling ads that reach these same customers, to providing its social media expertise to other industries. In so doing, the company has kept in step with, and often even anticipated, the growing complexity of the travel industry itself.

“Geneva is the heart and brain”

“Before, you used to call your travel agent and picked up a few brochures”, Mr. Ranque says. “But over the past three to four years, channels have grown exponentially: social media, blogs, Twitter, group sales, hotel chains' own websites, mobile apps... a multiplication of offer with endless touch-points. The complexity means that hotel operators are left wondering: “How do I play into this? Where

Cyril Ranque
Senior Vice President
Global Market Management





Then, Cyril Ranque begins listing a few other reasons why he likes his headquarters: “Geneva is a great place in terms of workforce: we have connections with the Swiss hotel schools, can draw on a local pool of statisticians and engineers, and it is easy to attract staff thanks to the quality of life. Second, GEM* offers local expertise, best practices and insights. Third, and not least, is Geneva’s great, little airport: I travel 50% of the time and, now, I suffer in the world’s mega-airports. Finally, we have had great help from the Economic Development Office and the Geneva cantonal government. They were keen to have us here and have helped to make things very easy!”

* GEM, *Groupement des Entreprises Multinationales*, an association of major Swiss and foreign multinationals based in the Lake Geneva Region.

do I invest? Which partners? What products? The travel business is increasingly fragmented and, without us, it would be incredibly expensive to be in all the new channels and spaces.”

The Expedia Lodging Partner Services headquarters in Geneva, he says, is the “heart and brain” of this service, with over 100 staff made up of some 40 nationalities. “In Geneva, we gather data on hotel markets and hotel forecasting on a daily basis from our 800 market managers worldwide and, based on that data, customize strategy, make recommendations and set up promotions to attract specific customer types.”

“We needed an independent view of the world, to serve all brands, every region, on a neutral basis”

It was, in fact, for this international outlook that Expedia moved the Lodging Partner Services HQ from Seattle to Geneva in 2010. “Historically, our departments, data and strategy all had a highly US-weighted point of view”, Cyril Ranque explains. “When I was running Asian operations from Hong Kong, I struggled to get equal services for Asia from Seattle. But it was clear that growth potential was outside the USA and that we needed an independent view of the world, to serve all brands, every region, on a neutral basis. So, we picked Geneva – and it has worked even better than expected.”

Growth in Asia, he adds, is fuelling the development of the travel industry; and the Geneva office, strategically located in the heart of Europe, convenient to both North American and Asian time zones, is ideal for this evolution.



Expedia, Inc., the largest online travel company, includes:

- **Expedia.com®**: world’s largest full service online travel agency
- **Hotels.com®**: hotel specialist with sites in more than 60 countries
- **Hotwire®**: leading discount travel site
- **Egencia®**: world’s fifth largest corporate travel management company
- **eLong™**: second largest online travel company in China
- **Venere.com™**: online hotel reservation specialist in Europe
- **trivago®**: online hotel metasearch company
- **Expedia Local Expert®**: online and in-market concierge
- **Classic Vacations®**: luxury travel specialist
- **Expedia® CruiseShipCenters®**
- **CarRentals.com™**

Looking out from STMicroelectronics's Geneva HQ



STMicroelectronics (ST) is a remarkable organization with sites for R&D, design, manufacturing and customer-service located all over the world. *Why Geneva* asked **Carlo Ferro, Chief Financial Officer and Executive Vice President, Finance, Legal, Infrastructure and Services**, about managing such an innovative operation from its headquarters in Geneva.

A reported one-fourth of ST employees work in R&D. How do you support a culture of innovation within such a big company?

Internally, we have for a long time encouraged and stimulated this culture across all our regions. One example, each year our ST Annual Recognition (STAR) awards recognize innovative teams and individuals whose hard work, team spirit, and achievements contribute to making ST a successful company and a great place to work. ST is among the industry's most innovative companies. We invest about 22% of our revenues in R&D. As a result we currently own approximately 16,000 patents corresponding to over 9,000 patent families, including 598 new filings in 2013.

Management of such diverse IP across such a structure must be a challenge. How do you handle that?

As our success depends on protecting our innovation and inventions, our patent portfolio clearly contains strategic assets that we carefully protect. We do this by reinforcing them, entering into broad patent cross-licensing arrangements with competitors when there are compelling business reasons to do so, and in some instances, by monetizing our inventions by directly licensing or selling patents, or licensing our technology in the form of IP blocks, designs, know-how, and manufacturing processes.

“The wearables market is bringing extraordinary opportunities to start-up entrepreneurs as well as established companies”

Are you working with any local start-ups?

ST established a strong culture of partnership from its inception, and start-ups and SMEs are part of our ecosystem along with our customers, suppliers, competitors, and leading universities and research institutes around the world. In Geneva, we have been co-operating since 2007 as an investor and a technology advisor with **Eclosion***. More recently, we launched new initiatives, in coordination with the Geneva Economic Development Office. For example, we are supporting **OrbiWise**, a young start-up owned by a team of former ST-Ericsson employees, which specializes in outdoor Internet-of-Things applications for smart agriculture and smart cities. In addition to hosting them for an initial period at our offices, we donated advanced RF laboratory equipment, helped them develop marketing channels, contributed to interactions with local authorities, and, of course, made the link with ST's advanced product divisions. We also collaborate with **Soundchip**, a Swiss company offering a broad range of solutions in audio-systems technology for wearable sound applications. Those are just two of many. We truly believe that developing eco-systems and nurturing people's know-how is part of our mission everywhere we operate, including around our headquarters here in Geneva.

ST is once again the title sponsor of the Wearable Technologies Innovation World Cup. How is your innovation enabling all those other companies and start-ups out there, designing

bracelets, watches, glasses and other wearable gadgets?

The wearables market is bringing extraordinary opportunities to start-up entrepreneurs as well as established companies. ST is in a unique position since we offer a complete portfolio of the semiconductors needed to build wearable devices – micro-controllers, sensors, low-power connectivity, analog and energy-management components. Together with our development kits and software tools, this portfolio and its ecosystem enable even companies that are not traditionally in electronics to quickly prototype and build solutions that can be manufactured in high volume and sold at attractive consumer price points.

What do you think these things will mean to our lives?

We are only at the beginning of what smart, sensor-enabled, connected objects can do. For wearables, this has been made possible through the smartphone, which acts as a personal hub for an Internet connection, while providing a convenient user interface to the wearable device, and many applications can build on the data being collected. I am sure numerous, fascinating inventions will revolutionize personal wellness and health, building on what we have already learned in the first wave of fitness devices. Wearables are one more example of how ST's technology augments everyone's life experience.

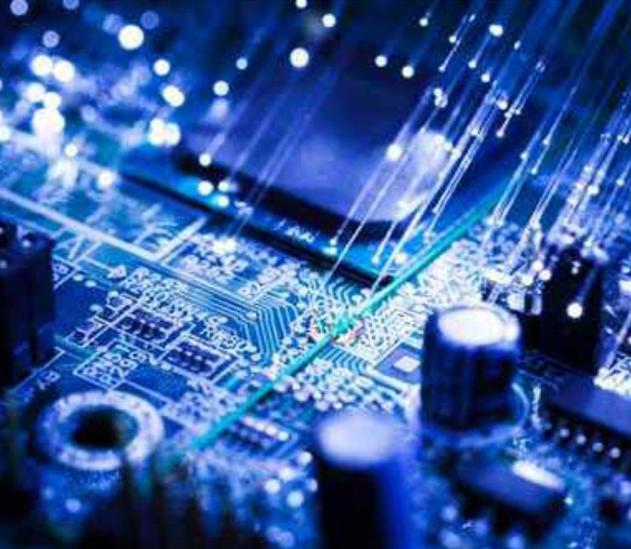
What does Geneva bring STMicroelectronics as a corporate headquarters?

Geneva is ideally located within easy reach of ST's main industrial sites in Europe and well-connected to all significant European high-tech eco-systems. It is also centrally located at the heart of Europe, ST's largest sales region. Besides this, Geneva is an international city, with a well-recognized financial

and service center that attracts a great pool of talented people. Its location, with its proximity to the Alps, also offers a great quality of life to our resident employees. To me, it is a great location for my children to grow and learn the area's truly international culture.

www.st.com

* Ecllosion is Geneva's life sciences incubator, operating under the aegis of the canton of Geneva.



STMicroelectronics was created in 1987 by the merger of two long-established semiconductor companies, SGS Microelettronica of Italy and Thomson Semiconducteurs of France. The group has approximately 45,000 employees, 12 main manufacturing sites, advanced research and development centers in 10 countries and sales offices all around the world. Corporate Headquarters, as well as the headquarters for Europe, the Middle East and Africa (EMEA) are in Geneva.

Thomson Reuters: making complexity simple – from Geneva



The slogan for Thomson Reuters' next-generation desktop – *Complexity has never been so simple* – might have been untrue without the company's customers helpdesk in Geneva.

“Over the past five years, we have rejuvenated our premium desktop, completely migrating 3000Xtra customers to Thomson Reuters Eikon, and the bulk of that migration was in 2013. That’s moving from 25 thousand terminals, to 125 thousand premium users asking questions that require skills inside this center in less than one year”, says **Frederic Messein, Global Head of Fixed Income Product Management**. “We would not have been in a position to migrate them all without the Geneva helpdesk.”

So, at a time when most company helpdesks were relegating back offices to the back of beyond, Thomson Reuters was developing its sophisticated customer service in Geneva.

“Our European helpdesk is the first point of contact for any customer in Europe”, he explains. “We have

some 39 nationalities in-house, speaking 18 languages. That highly-skilled workforce is the main reason we stay in Geneva.”

“We serve 125 thousand premium-feed users always asking questions”

Frederic Messein is sitting at the café area under the glass roof of Thomson Reuters' campus-like site near the lakeside village Collonge-Bellerive. The impressive complex was built in 1996 to house Reuters' first Continental Europe, Middle East and Africa headquarters and a data center running parallel with the one in London. At that time, the site's calm was key to its choice, he says. “Reuters needed a data center outside the UK but still in Europe, in a central place that was stable, both politically and geographically, with all of the necessary technology and services at our fingertips.”

Reuters' merger with Thomson in 2008, he adds, has since turned the company's focus more to





to the clients and finally their billing” added **Valérie Kirschmann, Associate General Counsel and Senior Site Representative**. “The Geneva office through its Direct department is also selling Thomson Reuters services to small and mid size clients in Continental Europe although this will be limited to certain countries as of next year.”

The Geneva location, Valérie Kirschmann adds, is a perfect place to host events. “We recently hosted our First Thomson Reuters Open Doors with more than 170 external guests attending, including representatives of the Canton de Genève and Commune de Collonge-Bellerive. Thomson Reuters Open Doors was one of the five events sponsored by the “Groupement des Entreprises Multinationales” to provide more visibility to multinationals in Geneva. “We also host two big events for customers in June and January each year and our clients are always impressed with the site”, says Frederic Messein. It is also an “easy-sell” to employees, he adds: “Thomson Reuters staff consider Geneva a good place to grow inside the company, so they are a dedicated group with low-turnover.”

“Geneva offers real options: it’s stable and not part of EU, and an office faces low bureaucracy and is therefore easy to run. In terms of data, it is also physical stable. At the same time, Geneva offers great airport connections and every kind of infrastructure already in place.”

www.thomsonreuters.com



North America, while its data center strategy has evolved with technology. “Location is less important for us now that our data is a portion of the Cloud,” Frederic Messein explains.

At the same time, however, the Thomson Reuters Continental European helpdesk came into its central role. “The 2009 financial crisis and the 2012 euro-zone crisis were shocks in our space,” says Mr. Messein. “We managed to do well, but it was a tough time in Europe – and a good argument for having a stable, well-trained helpdesk here. We live and breathe in a diverse universe. Being able to speak to someone in their own language brought real value to our customers.”

“Being able to speak in their own language brought real value to our customers”

“In addition to the helpdesk, we have an important customer admin department focusing on the administration of the services, their permissioning

First Thomson Reuters Open Doors

With more than 170 external guests attending, including representatives of the Canton of Geneva, Thomson Reuters Open Doors was one of the five events sponsored by the “Groupement des Entreprises Multinationales” to provide visibility to multinationals in Geneva.

The future of travel

SITA leads aviation move to ICT

Smartphones in hand, we now take managing a lot of our own travel needs for granted. For the industry, being able to fulfill passengers expectations in ICT has become a marketing plus. According to SITA's *2014 Airline IT Trends Survey*, the most successful airlines have three times the global average use. But a lot of complex R&D is behind these options, says **Stephane Cheikh, Innovation Manager, SITA Lab.**

What will “next generation” travel be like?

Seamless, as mobile and self-service options become more available and passengers, airlines and airports all embrace new technologies. For example, **SITA Lab, recently collaborated with Virgin Atlantic** on a wearable technology trial at London Heathrow Airport: the airline's concierge staff used Google Glass and Sony Smartwatches to deliver the industry's most high-tech and personalized customer service yet.

So “wearables” will be important...

Wearable technology will play an important role, but tablets are already there! Many of the world's top airlines already use **SITA's Crew Tablet** to

enhance inflight service by accessing passenger and operational data, such as passenger preferences, seating charts, baggage and connecting flights, safety manuals and weather reports. According to our Survey, more than three quarters of airlines will deploy crew services on tablets by 2016. So, if you haven't seen this already, you will soon! Another big area is the “intelligent airport.” Investing in business intelligence is a top priority for most airlines and airports around the world. Passengers will get information on flight times, bag status and waiting times at check-in, security and airport checkpoints, for example. This intelligence will also help increase collaboration among all airport stakeholders, so if there are long queues forming or disruptions due to severe weather, everyone can work together to manage these disruptions more effectively.

How is SITA involved?

SITA Lab is working with our industry partners, including some of the world's leading airlines and airports, to pilot a wide variety of technologies. This includes wearable technology, beacon technology, a variety of mobile technologies ranging from geo-location to e-wallets, near field communications and video analysis and scanning among many others.

“We're now trialing iBeacon technology throughout the Geneva Airport”

Any trials on in Geneva?

We're now trialing iBeacon technology throughout the Geneva Airport. iBeacon, developed by Apple, uses Bluetooth Low Energy and geofencing to trigger the display of location-relevant information on devices at the right time and in the right situation. With beacons, airlines and airports can easily provide passengers with indoor directions, walk-times to gates, lounge access and alerts about boarding. Knowing where a passenger is before sending information enables more effective communication.



Given the many multinationals and important organizations also here, are there any synergies?

Geneva provides a natural base for SITA, as well as for 35 other major international organizations – including air transport and telecommunications organizations such as the International Air Transport Organization (IATA) and the International Telecommunications Union (ITU). We collaborate with IATA on a wide range of initiatives, currently, for example, on a range of end-to-end self-service solutions and on new standards for wearable technology. Within Switzerland, SITA provides critical communications and applications to more than 70 Swiss-based air transport companies and international organizations, including Geneva Airport, Swiss International Airlines, Swissport, Skyguide and a number of UN agencies.

Any contacts with local university research labs and start-ups?

SITA collaborates with a number of Swiss universities and start-ups and a variety of companies in the Geneva region – and not only specialists in the air transport industry. One such partner is a local company called Bridget, which helps test different types of beacons.

SITA has operations in more than 200 countries and territories. Why have your base here?

Geneva provides a key hub for us in Europe and globally. In Geneva, we also benefit from a large pool of skilled, multilingual staff with industry knowledge, a strong work ethic and international and multicultural experience. And we have some of the world's leading technology schools on our doorstep, so we can tap into that expertise and work together to develop new innovations. And, of course, the excellent quality of life in Geneva and the surrounding region helps attract and retain talented employees.



Stéphane Cheikh
Innovation manager, SITA Lab

SITA: ICT pioneer... and still leading

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- Allows organizations and the wider industry to take advantage of shared infrastructure cost efficiencies
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www.sita.aero



Your identity is more valuable than ever

WISeKey brings the Swiss solution to cybercrime



Carlos Moreira
Chairman and
CEO WISeKey

By 2020, cloud computing, the Internet of Everything and Big Data, coming together in ways we cannot yet imagine, could add over US \$21 trillion in value to the world's economy.

But not unless something is done to ensure identity and protect data, says **Carlos Moreira, founder, chairman and CEO of WISeKey**: "People won't use what they can't trust."

Who and what you can trust online, he says, is now a key issue for us all: the cost of cybercrime, already estimated at US \$1 trillion, could triple over the next decade. Yet, most companies still rely on inadequate measures, like passwords. Mr. Moreira compares the lack of response to the spread of HIV in the 1980s. "We humans take time to react to threats", he says. "But when you are attacked – and I say 'when', not 'if' – a company can lose its entire valuation."

Prevention is slowly picking up – investment in cyber-security is currently at US \$50 billion worldwide and Mr. Moreira says it will increase to US \$150 billion within the next 10 years – but even that amount compares unfavorably with the US \$500 billion spent worldwide on advertising last year. Europe, he says, is especially vulnerable: investment in cyber-security is only US \$2.5 billion.

The recent attacks on Target and eBay got everyone's attention. But Carlos Moreira was already thinking about the problem when the World Wide Web was still a project at CERN in Geneva. The fact that Mr. Moreira was also in Geneva at the time – since 1983, as a United Nations expert in Telecommunications, Security and Information Networks – put him at the heart of the development of the Internet as researcher, standards-drafter and entre-

preneur. In 1999, he founded the digital encryption company WISeKey, the World Internet Security Company. If the name sounded a bit grandiose in 1999, Mr. Moreira's vision has come true: WISeKey is, today, one of the world's trusted providers of secure cloud computing and digital encryption services.

"Geneva will be to cyber-security what, for the past 200 years, it has been to private banking – and for the same reasons"

"I wanted to build an industrial business model around the uniqueness of Geneva," Carlos Moreira says. "With the shift to cloud computing, consumers are asking whether or not they should trust a company, so where the company is headquartered matters. Switzerland – ranked among the top five most-trusted countries – could capture an important market share."

He goes even further: Geneva will, in the 21st Century, be to cyber-security what, for the past 200 years, it has been to private banking – and for the same reasons.

"Geneva built its famous private banking industry on Swiss neutrality, stability and respect for privacy," Carlos Moreira says. "Now the same thing is happening with technology. Geneva is already attracting companies who want to associate technology with trust. Security is global, but trust is local: so a company based in Geneva under Swiss law is more trusted. Everything is dematerializing: Bitcoin is the future of currency and it failed only because it did not have a trusted location. If its headquarters were in Switzerland, under Swiss financial regulations, Bitcoin would be more trusted."

www.wisekey.com

Security for the long-term

ID Quantique is ready for the quantum computer



Look at something and you change it. This fundamental principle of quantum physics – the Heisenberg uncertainty principle – sums up why quantum cryptography provides unprecedented security for communications: any attempt to eavesdrop or tap in would be immediately detected.

ID Quantique, the first company in the world to bring a quantum key distribution system to the commercial market, has been offering fail-proof encryption to banks and governments since 2004. Meanwhile, most companies have been slow to adopt encryption of any kind.

“The risks vs. cost were not always understood,” says **Gregoire Ribordy, ID Quantique founder, CEO & Vice-Chairman**. “But last year, with the Snowden affair, the perception of risk changed. The cursor has moved towards investment in encryption.”

“Our guess is that quantum computing will be here in 5-10 years”

Assume, then, that a company decides it needs to encrypt data. The next question, Dr. Ribordy says, is what kind of encryption, conventional or quantum?

“It really depends on the lifetime of the encryption needed. Do you need data kept confidential for the next 1-2 years? Or, for 5-15 years or more? Conventional encryption is based on math: it is not totally secure, but it takes a long time to crack. But a quantum computer, if one is ever developed, will speed up the process.”

ID Quantique's network security

- Protects sensitive information in the public and private sectors.
- Sells quantum key distribution systems, single photon counters, and physical random number generators.
- Founded in 2001, out of the University of Geneva's Group of Applied Physics
- First quantum key distribution system on the commercial market.

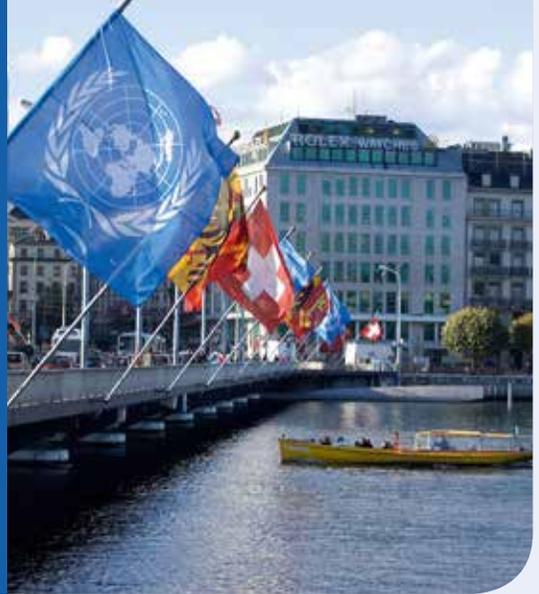
How close are we, then, to a quantum computer? “Scientists have been saying that it is 20 years away... for the past 20 years,” Gregoire Ribordy says. “We still don't have one. But there has, suddenly, been a lot of progress in this field and our guess now is that quantum computing will be here in 5-10 years. So, if you want to protect your information for more than 10 years, you must start now. Large organizations are collecting data they can't use today but will be able to use in the future – data you wouldn't even know they had.”

The market potential for quantum cryptography, he adds, is huge. “It's growing with the fact that threats are coming closer and closer. The challenge now is to educate the market. This year, ID Quantique is setting up an industry association for long-term security to explain why encryption is important and what can be done today.”

www.idquantique.com

Who should decide the Internet's future?

You and me, says the Internet Society



When most people speak of the Internet, they mean the World Wide Web, the “www” in front of every web address. Born as a small project at CERN in Geneva, Tim Berners-Lee’s idea of genius – to link up computers as “servers” across the world – has affected everything in our lives. The Internet is the underlying architecture and engineering standards that make the web possible. Arguably the most disruptive technology in history, it is a remarkable structure: not least because no central authority has ever been in control.

And that’s exactly how the **Internet Society** wants to keep things, says **Markus Kummer, Vice-President for Public Policy**.

“The intelligence of the Internet is at the edges,” says Mr. Kummer. “It is an extremely resilient technology, a distributed network with no single point of

control. Nobody can or should be able to turn it off.” From its offices around the world – the headquarters are in the US and the second biggest office is in Geneva – the Internet Society works to keep this structure diverse and open.

“This is a watershed year”, says Markus Kummer. “The disclosures last year of large-scale surveillance undermined trust necessary to the good functioning of the Internet. Policy-makers worldwide must rebuild trust in the Internet’s security.”

Build trust, that is, without increasing controls. “The Internet was built to be open, not secure”, says Markus Kummer. “How risk-averse do we want to be? We accept that absolute security is never guaranteed in the off-line world. We need to accept it in the online world, as well.”

www.internetsociety.org

Geneva’s growing role as the world’s capital of digital diplomacy

ICANN – Internet Corporation for Assigned Names and Numbers – opened office in Geneva, in Spring 2014.

“It makes sense for ICANN to open an office in Geneva since most international organizations, such as the ITU, WIPO, WTO and other organizations such as the DiploFoundation, the Internet Society and the WEF are also based here. Our presence here also allows us to reach out to ambassadors

and permanent missions of the UN. Being in Geneva offers us the possibility to be in contact with government representatives, from the ministries of foreign affairs as well.” says Tarek Kamel, Senior Advisor to ICANN’s President for Government Engagement & Head of ICANN Geneva office.

To reach another person on the Internet you have to type an address into your computer – a name or a number. That address must be unique so computers know where to find each other. ICANN coordinates these unique identifiers across the world. Without that coordination, there wouldn’t be one global Internet.

www.icann.org

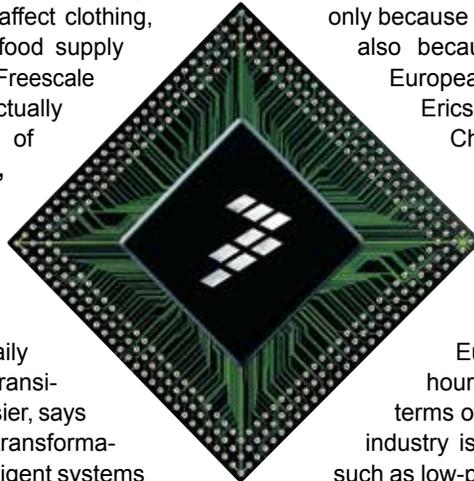


Freescale gets ready for the Internet of Things

Steve Wainwright
General Manager EMEA
Vice President Sales & Marketing

“Fifty billion” is the usual figure ventured, 50 billion connected things by 2020. The Internet of Things (IoT) (or Internet of Everything, depending on one’s sense of grandeur) will affect clothing, medical care, transportation, food supply and just about everything else. Freescale is one of the companies actually connecting all those billions of things, says **Steve Wainwright, General Manager EMEA, Vice President Sales & Marketing.**

So, what will this “inter-connectedness” mean to our daily lives? Some things will be transitional, making life just a little easier, says Mr. Wainwright; others will be transformational, like cars linked into intelligent systems to avoid traffic jams, or wearable monitors constantly checking, say, a patient’s glucose levels. “Creating and maintaining all these devices will be a great challenge for companies like Freescale. And challenges are what semiconductor manufacturers thrive on”, he adds.



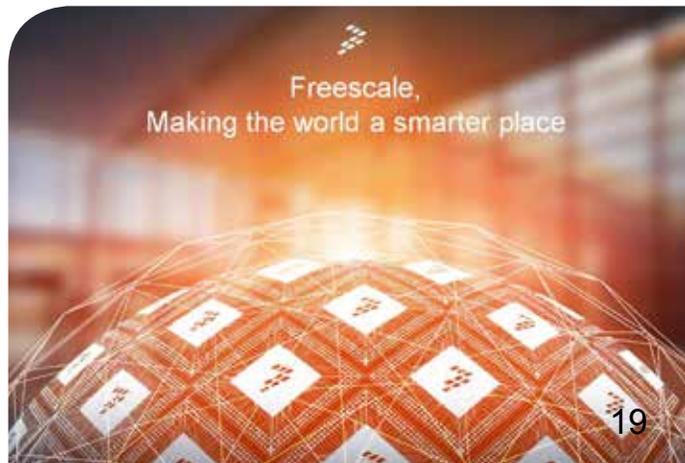
tions, called Freescale Technology Forums, to explain IoT. In Spring 2014, Freescale held a Forum in China. “China is an important market for us not only because of the booming local market but also because we care about how our European partners – Alcatel Lucent, Ericsson, Nokia, etc. – are doing in China. It’s important to have a presence at their European headquarters and at their key operating bases, like China.”

“Geneva is a fantastic place for what I do, as I can be in most European key markets within two hours,” says Steve Wainwright. “In terms of local innovation, Switzerland’s industry is driven by innovation in areas such as low-power and communications. Our tech alliances take advantage of being in this region. In the future we are interested in recruiting for our business, so having such highly-reputed tech universities close-by is also important.”

www.freescale.com

“Switzerland’s industry is driven by innovation in areas such as low-power and communications”

Freescale moved its European office for sales, billing and marketing to Geneva in 2004. “Before, we did the billing for each country individually. By centralizing here, taking advantage of the Swiss structure, we have seen real advantages,” he explains. The Geneva office is also taking a leading role in preparing a series of technical demonstra-



Planet Earth goes geoSMART



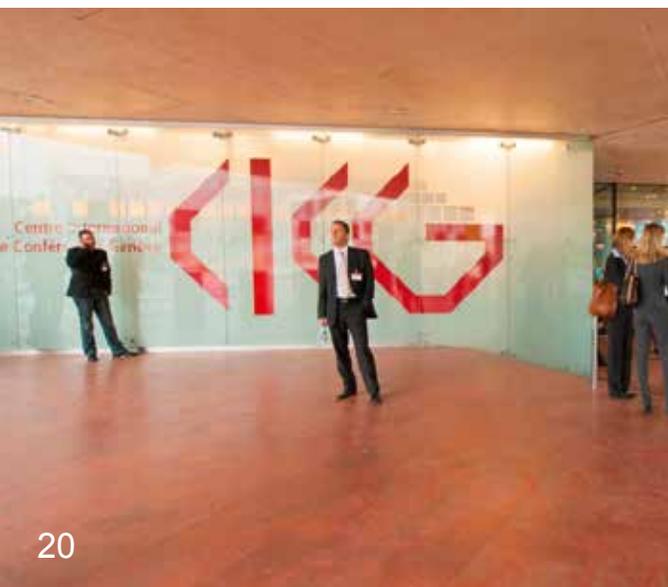
Geospatial technologies are harnessing spatial data in extraordinary new ways, replacing “Where am I?” by, “Where am I in relation to everything else?” Fight climate change, map populations, track disease, assist survivors of natural disaster – these are only a few of the positive uses. **The Geospatial World Forum**, organized by the **Swiss Federal Office of Topography** and **India’s Geospatial Media and Communication**, recently gathered over 1000 delegates from 78 nations in Geneva’s International Conference Centre Geneva (CICG) to explore the new possibilities under the theme – “geoSMART Planet: Resources + Infrastructure & YOU!” An exhibition by leading technology providers, policy makers and users showcased the innovations carried out using geospatial tools and the upcoming trends in the field. A Geospatial World Policy Prize was awarded to the 3D Ethical Charter, an initiative

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- Inclusion in online convention calendar

supported by the **State of Geneva**. The Geospatial World Forum was assisted by the **Geneva Convention Bureau**, part of the Geneva Tourism & Conventions Foundation.

gvacb@geneva-tourism.ch



Geneva, famously, hosts hundreds of international conferences, congresses and trade shows of all sizes every year. Many of these events choose the **International Conference Centre Geneva (CICG)**. Located near the city center, within walking distance of the Place des Nations, the CICG is obviously convenient. The security-conscious building also offers a remarkable degree of modularity: 19 conference rooms, seating from 20 to 300; two large halls (up to 2,200 seats); 60 offices; a 600m² multipurpose space for exhibitions, cocktails, etc.; and a bar/restaurant for 600 guests. State-of-the-art conference ICT technology supports any activity required.

www.cicg.ch

Connecting Geneva at the speed of light

The SIG installs new fiber-optic network

Competitive advantage can turn on getting information fractions of seconds ahead of the rest. So, fiber optic's speed – up to 200 times faster than copper cable – and greater bandwidth are vital. Large corporations based in Geneva have, for the past decade, benefited from private fiber optic systems. Now, the **SIG*** is making Geneva future-ready with rapid Fiber to the Home (FTTH) Internet access throughout the canton. Start-ups, artisans, small/medium-sized enterprises and individual households will all share in the benefits of Internet at the speed of light.

“Ready for the future, with whatever capacity is needed”

“From now on, fiber optic will be a basic infrastructure, like electricity or water,” explains **Pascal Abbet, Director of SIG's Energy Sector**. “The SIG has over 10 years experience in B2B, providing fiber optic to companies and telecom operators in Geneva. Now, we are expanding the offer and network to a new client base.”

Moving

The same company that has supplied energy for Geneva's industrial past is leading the way to Geneva's future. In the 1890s, the SIG's primary role was to pump water, the canton's main energy source: the symbol of Geneva – *le Jet d'Eau* – began as a pragmatic way to release pressure on the hydraulic system. With the canton's industrial development, the company has expanded into solar, geothermal, biomass, wind and natural gas... and fiber optics.

Not only does Geneva's new network provide the fast, broad capacity of state-of-the-art fiber-optics, it does it in double-capacity: the SIG and Swisscom are working together to put in a dual network. By 2016, the Geneva canton will have 80% coverage. “We are ready for the future with whatever capacity the future may require”, says Pascal Abbet.

The new data centers moving into the region have taken note. “Among their major criteria are a high-quality energy-supply and good connections for telecommunications. SIG offers both”, says Mr. Abbet. “Between our projects for energy performance and recovery of thermic ‘waste’, everything is going in the right direction.”

The cantonal network will also link Geneva into the nation-wide Swiss optical fiber network. “Geneva's capacity will provide for any evolution of the ICT industry, offering services for entertainment, security, health and wherever Big Data may take us”, says Pascal Abbet.

The Internet's possibilities are limitless – if speed and capacity are available. The SIG's job is to make sure that, however the Internet evolves, the “pipe” is ready and able to handle the job.

* The SIG: *Services Industriels de Genève*

www.sig-fibreoptique.ch



Three-day window on innovation

Lift Conference in Geneva



"Davos may dwarf it, but Lift is the edgier of the Swiss events," says Wired magazine. Attracting everyone from CEOs and engineers to artists and anthropologists, the annual Lift Conference in Geneva has, since 2006, made its name as Europe's most unusual tech conference. At this year's Lift in February over 1100 participants from 35 countries came for three days of presentations, workshops and networking around the business and social implications of technological innovation*.

Like the ICT industry itself, Lift is constantly innovating. "At the moment, the conference is moving towards a more interactive experience to create more meaningful interaction but also through a "mapping" of the audience – multinationals, start-ups, SMEs, NGOs, scientists – according to their needs," says **Abir Oreibi, President of Lift Events**. "This year, we offered in partnership with Accenture an Executive Briefing for CEOs who may not have time to attend the entire three-day conference, in which we shared the key trends to be covered at Lift as well as three or four speakers explained the key trends that could have potential impact on their businesses. It was an intimate format, bringing together start-ups and CEOs and Senior Executives from multinationals and Swiss SME's. We are now going to do the same thing for NGOs."

One of Lift's attractions is the Alp ICT Venture Night presenting a selection of Swiss start-ups. Stepping onstage in front of Lift's tech-sophisticated crowd must seem like both the best and worst night of a young entrepreneur's life. Abir Oreibi says it is also a "tough call" to select the contenders from the dozens of new start-ups each year: "There's a whole new dynamism to the region."

In addition to its public events, the Lift organization leverages its experience and network on an individual basis, curating and co-producing events, running interactive workshops and promoting entrepreneurship for such clients as Allianz, Pictet, and Swisscom.

Building on the success of its flagship conference in Geneva, Lift has organized and supported some 30 complimentary events around the world. "Lift has strong Swiss DNA but we have always created bridges, internationally," says Ms. Oreibi.

In September, Lift will organize its first event in China leading a delegation of Swiss designers and entrepreneurs. "The idea is to help Swiss tech entrepreneurs understand the market and create bridges between the two countries tech and designers communities. And for Lift, it's a scouting event – we want to do a Lift China in the second stage," she explains.

The young companies are in good hands. In 2000, it was Abir Oreibi, as Alibaba's EMEA General Manager and Director, who helped that fledgling start-up enter the European market.

www.liftconference.com

* All Lift talks are streamed live during the conference and maintained on the website.

Alp ICT supports Western Switzerland's ICT Hub



One of Lift's star attractions is Alp ICT Venture Night, where selected start-ups from Western Switzerland present innovative projects.

Alp ICT began with a study: to determine, in 2009, Western Switzerland place in the fast-growing field of Information and Communications Technology (ICT). "We looked at the knowledge here and the areas where we thought our region could be strong and we identified nine main areas of expertise", says **Didier Mesnier, Executive Officer of Alp ICT**.

Only five years later, the cluster has grown to over 680 companies, with Alp ICT helping to link business, R&D, and financial and political players. "Not to mention the many structures supporting innovation, like the University of Geneva, HEG, hepia, EPFL, HCG, CERN, as well as major research underway in the area, like the Human Brain Project", he adds.

Geneva, Mr. Mesnier says, is a key part of the cluster. "Geneva is an extremely dynamic market thanks to the diverse local economy – important multinationals, international organizations and NGOs, trading companies, SMEs – all with significant needs for innovative ICT products and services. The market opportunities here are growing fast."

Alp ICT looks for start-ups with the potential to develop into international players and supports their expansion. "We are seeing start-ups in discussion with the big multinationals and on the radar of companies like Google and Apple", Mr. Mesnier says. "The Swiss brand gets an impressive amount of attention, especially in Asia."

www.alpict.com

Data center

Geneva has a growing cluster of data centers offering comprehensive services for every type of business and organization.

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- HousingPro
- DFI
- ISP Solutions
- CERN
- Verizon

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- IT solutions for the environment
- ICT systems and networks
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- Multimedia & entertainment
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