



**“TAKING UCAAS GLOBAL – TAP INTO THE NEXT GROWTH PHASE
OF UNIFIED COMMUNICATIONS BY SERVING YOUR
INTERNATIONAL CUSTOMERS”**

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Introduction

The increased use of cloud capabilities by enterprises for both computing and communications tasks has challenged Service Providers to offer enterprises these services. As service providers wrestle with fulfilling this demand they are also faced with an increasing number of customers who want these services delivered on a global or multi-national basis.

Communications is arguably the only cloud service that is limited by the boundaries of national geography, with services often sold only on a national basis. Service Providers are also seeing a significant increase in the adoption of cloud communication from medium and larger enterprises, and with these larger companies comes an increased requirement for multi-national services and a new set of requirements, both commercially and from a service point of view.

Service providers are also undergoing increased competition as the barriers to offering a service fall and a new breed of international service provider emerges. Therefore, the opportunity and necessity for service providers to offer a service to existing multi-national customers should not be ignored.

Demand for Multi-National Services

One of the key drivers for the increasing demand for multi-national cloud communications services is the increased adoption of cloud services by mid-market and large enterprise customers. Mid-Market and larger enterprises have more multi-national requirement for services and indeed higher demands overall from their Service Providers.

Clearly, the cloud is being accepted at the heart of enterprise IT and Communications, a trend supported by multiple pieces of research. In 2016, the “Uptime Institute Data Center Industry Survey”¹ found that 50% of enterprise IT executives predict that most IT workloads will move off-premises to either cloud or co-location sites in the next four years, with 23% having expected it to happen in the last year. In February 2017, Gartner also highlighted this trend, predicting the worldwide public cloud services market to grow by 18 percent to a total of \$246.8 billion² in 2017.

The move to cloud based communications is seeing similar growth, albeit different by geography. Cavell’s own research on Cloud Communications showed strong growth in all countries we track, but also an increase in the penetration amongst medium and large enterprise. In most markets the initial market was based on the SME, but we are now seeing an increased adoption particularly in medium and large enterprises. This move is reflected

¹ <https://uptimeinstitute.com/about-ui/news-press>

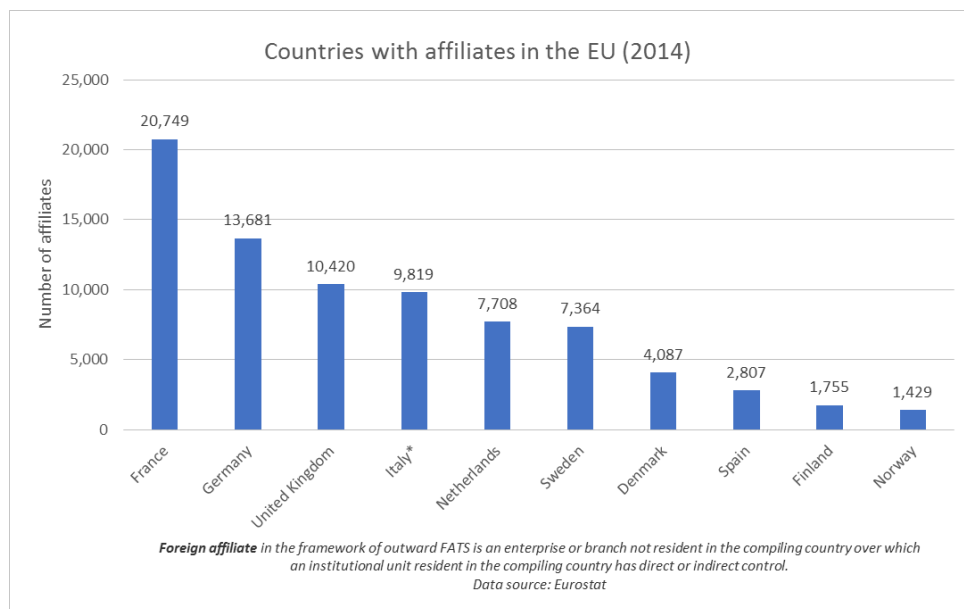
² <http://www.gartner.com/newsroom/id/3616417>

by most providers and vendors in the market; companies like 8x8 report that in the last 2 years their mid-market revenue has doubled and the percentage of their overall revenue has grown from 42% to 55%.³

Sizing the Market Opportunity for International Services

One of the largest drivers for Global Cloud Communications is the requirement to serve the foreign offices of your national customers. As seen in Figure 1, companies in the major EU countries have a significant number of affiliates in other EU countries. For example, French companies have over 20,000 affiliates throughout Europe.

Figure 1

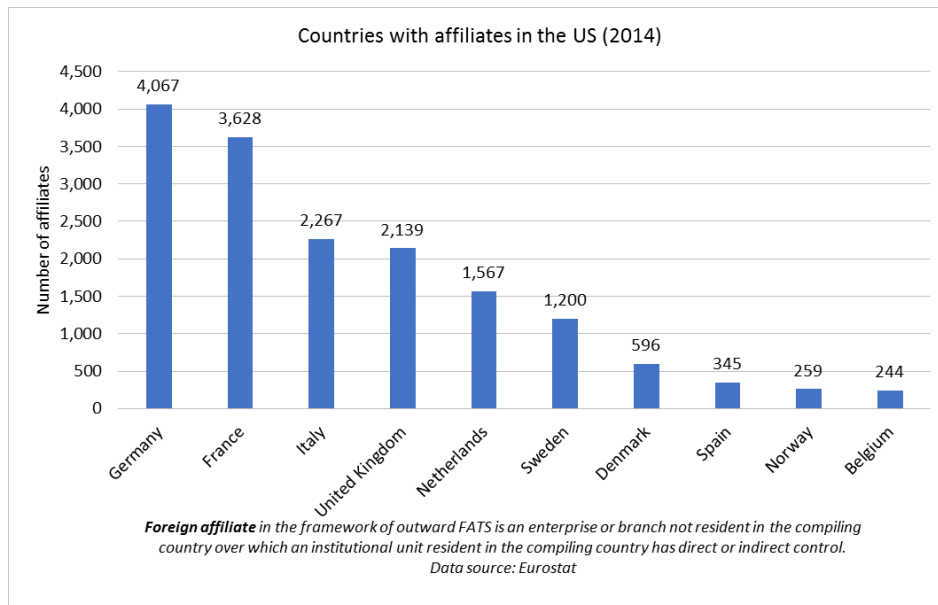


Looking at how many companies in each market have affiliates, it should be noted that some companies may have more than one and others none. As an example, the United Kingdom has 39,520 enterprises with over 50 employees⁴, and according to Eurostat's graph above there are over 10,000 affiliates. Therefore, if you are targeting this segment there is a large potential that they indeed have a foreign affiliate in Europe (and/or the USA). Figure 2 demonstrates the importance of the US to European enterprises; most major European countries have many affiliates there.

³ 8x8 Investor presentation January 25, 2017

⁴ BUSINESS POPULATION ESTIMATES FOR THE UK AND REGIONS 2015 Departmental for Business and Innovation & skills

Figure 2



The same trend is also seen in Asia. There are many companies with foreign offices in all major developed countries, and as these enterprises move to the cloud, companies must aim to serve their international requirements.

We have already seen some providers taking advantage of this international capability as a way of differentiating their proposition. Many companies are looking to expand in Europe, Asia and the US to achieve this; notable examples include 8x8, Fuze, Vodafone, NFON, Vonage, Broadsoft and Masergy, to name a few.

Growing Opportunity

As we see medium and large enterprises increasingly adopting cloud services, combined with their increased likelihood to have foreign affiliates, providers are being faced with the requirement to offer a solution for their multi-national sites. The provider faces the combined threat of losing out on the revenue of serving these other sites, but also the potential of a competitor getting a hold into the account. It is now becoming critical to defend your customers on whatever shores they reside.

Service Providers attitudes to Internationalization

With an increasing case being made for creating an international service, Cavell was interested in the opinions of Service Providers, and where they saw the key challenges to this. We spoke to a sample of Service Provider to gauge their attitudes to requirements for multi-national services. The main factors affecting this requirement were the size of company the Service Provider was focused on serving, and the geographical area. Service

providers focused on customers with less than 20 users see the importance of offering multi-national services as relatively low. However, for service providers with medium and large company customer bases, the importance they place on multi-national services has increased dramatically. We are now seeing companies such as NFON, 8x8, Masergy and Blueface whose ability to serve multi-national requirements is core to their proposition.

Providers were also asked what were the main concerns they had when considering offering multi-national services; in figure 3 below we can see what they highlighted.

The most noted concerns were around understanding the size of opportunity, and the potential cost of entering. Technically, the main concerns were focused around the localization of services and numbering.

Figure 3

Commercial Concerns	Technical/Operational Concerns
Knowledge of Individual Market Size of Opportunity vs Cost of Entry Pricing & bundling requirements Cost of entry to Market Sizeing Market Opportunity Ability to serve multiple countries	Localisation of service Billing & Tax regulations Local Language & deployment skills Cost of platform Ability to offer consistent service Platform to Platform NNI Numbering & Regulation Extension to Exstension Dialing Emergency service provision

Service Provider options

Examining the options for Service Providers to offer multi-national services, we see four main routes being currently explored:



Acquire

Many Service providers when looking to extend their service into new markets, consider the potential of acquiring a local service provider. In the recent past, we have seen several acquisitions including:

- *8x8 acquisition of Voicenet Solutions - December 2013*
- *West Corporation acquisition of Magnetic North - November 2015 (UK)*
- *Broadsoft's acquisitions of Placetel - Jan 2015 (DE) & HIPCOM - August 2013 (UK)*

We have seen a lot of activity particularly from US service providers particularly who have looked to make acquisitions in Europe.

Positives

- Acquire local skills and capabilities
- Existing customer base who may have multi-national requirements
- Local knowledge of market and regulatory regime

Negatives

- Platforms of acquired business may not be compatible with existing platforms
- Limited number of acquisition targets for key platform's
- Integration of Business processes
- Cost of acquisition may be inflated by areas of business that are not core to acquirer
- Most are one market offerings/local players

Build/Manage

Naturally, we often see service providers wanting to build their own platform infrastructure in a new country, normally still utilizing wholesale operators to provide Data Centres, Network and voice origination, numbering, and termination to ensure regulatory compliance. This can mean utilizing their own platform technology or a commercial platform such as Broadsoft Broadworks.

Positives

- Control of platform and development priorities
- Potential long-term cost advantages
- Ease of integrating multi-country platform instances

Negatives

- Time to market – it can take up to 2 years to establish a new platform
- Short term costs may not be supported by initial volumes of business
- Localization – particularly, self-built platforms need language and localization
- Access to local skills

Partner/Outsource

As in the PBX market, we have seen some attempts by service providers to partner with a service provider in the different country to provide their services. These approaches have had limited success, partly due to limited mutual traffic between the two parties, and problematic platform integration.

We are now seeing a new Outsource business model emerging where platform providers and service providers are offering outsourced platform capability to Service Providers both

in country and to provide international services. We are seeing nearly all platform providers offering an outsource in country solution, and increased focus from players, such as PCCW Global, in offering Service Providers outsourced capability in country, but also enabling potential multi-national solutions. In this model, the service provider can buy the service on a per user monthly basis potentially in multiple countries.

Positives

- Speed to Market
- Access to local skills
- Consistent service wrap
- Regulatory & Tax and billing issues resolved
- Lower short to medium term costs

Negatives

- Integration with Service providers own in country platform
- Longer term cost maybe higher than having your own platform (but this is maybe negotiable under a mange, operate and then transfer model)
- Platform development is defined by outsource partner

Extend

We also see providers accessing new markets by extending their platforms from another market. In this case, the provider chooses not to put their platform into the other market, preferring to take inbound numbers (and normally a local emergency service) from a wholesale operator, and then bring signaling back to a platform in another country. We see a variation of this where sometimes a provider chooses to put an SBC (Session Border Controller) in country, for media to remain local and not trombone, but so that signaling etc. comes back to the platform.

The above approach can be used to enter a market, but service providers need to consider the impact on the user of bringing signaling and application traffic back to the platform in a different country. This could cause issues in terms of user experience.

Positives

- Speed to Market
- Low costs as no need to provide additional platform
- Potential to reach multiple countries

Negatives

- Ability to provide consistent service levels
- Distance and latency may affect ability to provide full UC service portfolio
- Regulatory concerns

- Localization – although providing numbers and voice service platform may still need localization

In practice

Providers often offer a hybrid of the above approaches. For example, when larger American providers (such as 8x8, RingCentral, Fuze, Vonage) enter a market, they choose to either build or outsource an initial platform in a couple of key countries, and then extend it into others using wholesale inbound and DDI capability. Overtime, as particular markets start to take off, they may then choose to provide a platform capability in the market.

Summary

As mid-market and larger enterprises adopt the technology, the move towards cloud services and the increasing need for multi-national services is undeniable. Service providers should consider both how to deal with these larger customers' services requirements, and what are the best technical and operational approaches. As previously highlighted, Service Providers have four main options to achieve this: Acquire, Build, Partnering/Outsourcing or simply Extending existing services.

The Service Provider will be offered more outsourcing options both for their national and multi-national requirements, but the answer for service providers may still be a hybrid of these approaches to meet their customer requirements. As the customer's requirements grow, the maturity of solutions offered to service provider will also develop; the one thing that is clear is that if a service provider has ambitions to serve mid-market or large enterprise customers they will need to offer a solution sooner or later.



nTwine Global UCaaS from PCCW Global

Your clients want to grow their global business? Our UCaaS infrastructure is already there.

Serving the international UCaaS needs of mid-market and larger organisations is proving to be very difficult for many service providers. Large businesses that move their communications infrastructure to the cloud cannot be limited by regional or national boundaries.

PCCW Global, the international operating division of HKT, Hong Kong's premier telecommunications service provider, has a long history in serving global organisations with best in class communications services. We operate our own resilient global fibre network spanning over 3,000 cities and 150 countries and have bi-lateral relationships in place with 200 operators around the globe. Our network supports our portfolio of integrated global communications solutions which include Ethernet, IP, fibre, international voice and VoIPX services, managed network & security services and our expanding "as-a-service" solutions including nTwine, a feature rich UCaaS platform which has been deployed across the globe.

Plug in to our global nTwine service and instantly serve your International customers without the hassle and the cost of building your own platform and support infrastructure. nTwine is a global platform built on our highly-resilient data network and centres, that are strategically located across the globe to ensure the highest resiliency, adherence to country-specific data sovereignty requirements and advanced security. Through a single interface, we can support all options of the 'build', 'partner' and 'extend' models to serve all your domestic and international UC requirements:

- Local, National and International voice termination
- Local in-bound phone numbers and extensions with local out-bound dialing
- Presentation of national CLI
- Short Code and non-geographic support
- Local DID porting
- Emergency Calling
- Lawful Intercept
- International extension-to-extension dialing
- An extensive range of global UC feature packages
- Streamlined administration tools and consolidated billing
- 24 x7 support and 3 global service operating centres
- Localised billing, routing and tax calculation

For more information contact us at: ntwine@pccwglobal.com.