



## M2M Case Study | Belgium Allows M2M Permanent Roaming

### Numbering Policies for a Connected World

For centuries commercial trade has depended on cross-border cooperation and that remains true today. Indeed, with advances in electronic communications, specifically the “Internet of Things” (IoT) and machine-to-machine (M2M) applications, the importance of truly global policies that facilitate transnational connectivity has never been more crucial. Therefore, regulators around the globe are assessing existing regulations, particularly numbering policy, to determine where progressive action is needed to ensure that numbering management aligns with evolving technology to enable innovation and sustainable competition. Belgium represents a recent example of where a regulator is proactively taking action to liberalize its national numbering plan to strengthen the IoT ecosystem.

### Belgium Overhauls Numbering Policy to Allow Extraterritorial Use

Since 2007 [Article 8 of] the Belgian Royal Numbering Decree<sup>1</sup> has generally prohibited the use of foreign numbers in Belgium. Recognizing the need to update numbering policy to reflect changing technologies, in December 2014 the Belgian telecom regulator, BIPT, published a consultation<sup>2</sup> on the revision of its numbering plan. In that consultation, BIPT proposed, among other things, to reverse policy and authorize the extraterritorial use of E.212 (MCC+MNC) and E.164 (mobile telephone) numbers. BIPT reasoned that by using a single series of numbers (i.e., the use of Belgian numbering resources within and outside of Belgium, and the use of foreign numbering resources within Belgium), operators could optimize billing and operational systems, noting this was especially important for specialized services like M2M.<sup>3</sup> Here the regulator acknowledges that the business models for M2M differ substantially from those of more traditional mobile communications and that significant benefits arise from the use of a single numbering solution. Notably, BIPT also considers the implications of the extraterritorial use of numbers in a variety of contexts, including interconnection, number portability, data retention and lawful assistance, concluding that there do not seem to be insurmountable obstacles to the proposition.<sup>4</sup>

By allowing the extraterritorial use of national numbering resources, BIPT does not diminish or restrict its scope of authority. BIPT retains oversight mechanisms. In fact, in its consultation, BIPT proposes a

<sup>1</sup> *Arrêté royal relatif à la gestion de l'espace de numérotation nationale et à l'attribution et au retrait des droits d'utilisation de numéros*, 27.4.2007 (Royal Decree on the administration of the national numbering space and the grant and withdrawal of rights to use numbers—“the Belgian Numbering Decree”).

<sup>2</sup> *Consultation at the request of the BIPT Council of 25 November 2014 regarding the revision of the policy for the management of the numbering plan* (“BIPT Consultation”) at <http://www.bipt.be/en/operators/telecommunication/Numbering/regulation/consultation-at-the-request-of-the-bipt-council-of-25-november-2014-regarding-the-revision-of-the-policy-for-the-management-of-the-numbering-plan> (French and Dutch)

<sup>3</sup> “Operators can optimize billing and operational systems if they can serve different countries with a single series of numbers. This is especially important for specialized services, like M2M.” (“Les opérateurs peuvent optimiser leur facturation et leurs systèmes opérationnels s'ils ne doivent supporter qu'une seule série de numéros pour différents pays. C'est surtout important pour certains services spécialisés comme les services M2M.”) BIPT Consultation (French version) section 4.3.b.ii. at page 28.

<sup>4</sup> *Ibid.*

general principle<sup>5</sup> for addressing policy issues arising from extraterritorial use of numbers, specifically that the regulatory authority of the country where consumption takes place should be responsible for regulating that consumption, except for numbering, where the authority whose numbering plan is being used remains competent. Distinguishing between regulation of numbering and regulation of other consumer protection matters is a sound policy approach.

After careful consideration and review, in August 2015 BIPT published a summary<sup>6</sup> of conclusions to its consultation in which it confirms its aforementioned proposals and analysis to formally introduce more flexibility in the general extraterritorial use of Belgian numbering resources.<sup>7</sup> For M2M services in particular, BIPT calls for the Royal Numbering Decree to be amended to expressly authorize the permanent use of Belgian numbers abroad and of foreign numbering capacity in Belgium.<sup>8</sup> Contributing to BIPT's decision is industry consensus that there is market demand for the extraterritorial use of numbering resources<sup>9</sup> and, importantly, that the proposition does not pose any significant problems.<sup>10</sup>

Although at an early stage of development, M2M applications, which are at the core of the IoT, have already demonstrated the potential to massively improve efficiency, productivity and social welfare in diverse areas. However, technology does not recognize territorial boundaries and that reality must inform policy or markets will be fragmented and technological potential mitigated. Belgium's BIPT should be commended for its forward-thinking decision to amend regulations to expressly authorize the permanent extraterritorial use of E.212 and E.164 numbers for M2M-type applications and thus enable the global trajectory of M2M and the IoT to accelerate.

<sup>5</sup> "We could establish the following general rule: the authority of the country where consumption takes place is responsible for regulating consumption, except as regards numbering, where the country whose numbering plan is used is responsible." ("L'on pourrait établir la règle générale suivante: c'est l'autorité du pays où a lieu la consommation qui est compétente pour la réglementation de la consommation, sauf en ce qui concerne la numérotation, pour laquelle c'est le pays du plan de numérotation qui est compétent.") BIPT Consultation (French version) at page 25.

<sup>6</sup> *Summary and further analysis answers to the consultation at the request of the BIPT Council of 25 November 2014 on reviewing the policy regarding the numbering plan management of 28 July 2015* ("BIPT Summary") at <http://www.bipt.be/en/operators/telecommunication/Numbering/regulation/summary-and-further-analysis-answers-to-the-consultation-at-the-request-of-the-bipt-council-of-25-november-2014-on-reviewing-the-policy-regarding-the-numbering-plan-management-of-28-july-2015> (French and Dutch)

<sup>7</sup> BIPT's conclusions will need to be implemented via amendments to the Royal Numbering Decree. The revised legislation is expected to come into force in 2016.

<sup>8</sup> Article 8 of the Royal Numbering Decree will be amended to include the following statement: "The use on a permanent basis of Belgian numbers abroad and vice versa of foreign numbering capacity in Belgium is authorized for M2M applications." ("L'utilisation sur une base permanente de la capacité de numérotation belge à l'étranger et vice versa de la capacité de numérotation étrangère en Belgique est autorisée pour les applications M2M.") BIPT Summary (French version) section 10 at page 35.

<sup>9</sup> "A majority of respondents indicate the following items: 1) there is a market demand for the extraterritorial use of numbering resources; 2) there are no significant problems except for calls to emergency services." ("Une majorité de répondants indiquent les éléments suivants: 1) il y a une demande du marché pour l'utilisation extraterritoriale des ressources de numérotation; 2) il n'y pas de problèmes significatifs sauf pour les appels vers les services d'urgence.") BIPT Summary (French version) section 10, number 86 at page 29.

<sup>10</sup> While respondents suggested that, in general, the extraterritorial use of Belgian numbers could be problematic for emergency services, BIPT concluded that "[t]he approach to allow the unconditional use of extraterritorial numbering resources on a permanent basis for M2M applications, both for the E. 164 [and] that for the E. 212, has no impact on the emergency services." ("L'approche pour permettre l'utilisation extraterritoriale inconditionnelle de ressources de numérotation sur une base permanente pour les applications M2M, tant pour les E.164 que pour les E.212, n'a pas d'impact sur les services d'urgence.") BIPT Summary section 10, number 91 at page 31.