
IEEE P802.11
Wireless LANs

FH Hopping Patterns for New Regulatory Domains**Date:** July 5, 1999**Author:** Dean Kawaguchi
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Abstract

This submission proposes new channel sets and hopping patterns for use of the Frequency Hopping PHY in regulatory domains that are currently not included in the 802.11 standard. The current domains defined in 802.11 are USA/Europe, Japan, France, and Spain. The new regulatory domains addressed include Korea, Israel, Mexico, and Belgium-outdoor.

Proposal

The summary of current domains and the new proposed domains are summarized in Table 1.

Regulatory Domain	Domain Number	Regulatory Band Limits (MHz)	Operating Range (MHz)	Number of Channels	Hop Table	Sets & Patterns
Current Domains						
USA/ETSI		2400-2483.5	2402-2480	79	HST-79	3 x 26
Japan		2471-2497	2473-2495	23	delta	3 x 4
Spain		2445-2475	2447-2473	27	HST-27	3 x 9
France		2446.5-2483.5	2448-2482	35	HST-35	3 x 11
New Domains						
Korea		2452-2478	2454-2476	23	delta	3 x 4
Israel		?	2420-2454	35	HST-35	3 x 11
Mexico		2450-2483.5	2452-2480	29	HST-29	3 x 9
Belgium-outdoor		2460-2483.5	2462-2481	20	HST-20	3 x 6

Hop Sequence Tables	Pattern Tables
HST-79 { 0, 23, 62, 8, 43, 16, 71, 47, 19, 61, 76, 29, 59, 22, 52, 63, 26, 77, 31, 2, 18, 11, 36, 72, 54, 69, 21, 3, 37, 10, 34, 66, 7, 68, 75, 4, 60, 27, 12, 25, 14, 57, 41, 74, 32, 70, 9, 58, 78, 45, 20, 73, 64, 39, 13, 33, 65, 50, 56, 42, 48, 15, 5, 17, 6, 67, 49, 40, 1, 28, 55, 35, 53, 24, 44, 51, 38, 30, 46 }	Set 1 = { 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42, 45, 48, 51, 54, 57, 60, 63, 66, 69, 72, 75 } Set 2 = { 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40, 43, 46, 49, 52, 55, 58, 61, 64, 67, 70, 73, 76 } Set 3 = { 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59, 62, 65, 68, 71, 74, 77 }
HST-35 { 17, 5, 18, 32, 23, 7, 16, 4, 13, 33, 26, 10, 31, 20, 29, 22, 12, 6, 28, 14, 25, 0, 8, 1, 15, 3, 11, 30, 24, 9, 27, 19, 2, 21, 34 }	Set 1 = { 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30 } Set 2 = { 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31 } Set 3 = { 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32 }
HST-27 { 13, 4, 24, 18, 5, 12, 3, 10, 25, 19, 8, 23, 15, 22, 9, 21, 0, 6, 14, 1, 20, 7, 16, 2, 11, 17, 26 }	Set 1 = { 0, 3, 6, 9, 12, 15, 18, 21, 24 } Set 2 = { 1, 4, 7, 10, 13, 16, 19, 22, 25 } Set 3 = { 2, 5, 8, 11, 14, 17, 20, 23, 26 }
HST-20 { 9, 18, 3, 13, 4, 14, 2, 11, 0, 8, 17, 10, 1, 16, 7, 15, 5, 12, 19, 6 }	Set 1 = { 0, 3, 6, 9, 12, 15 } Set 2 = { 1, 4, 7, 10, 13, 16 } Set 3 = { 2, 5, 8, 11, 14, 17 }
HST-29 { 14, 4, 26, 19, 6, 13, 3, 10, 27, 21, 8, 25, 11, 24, 18, 9, 23, 12, 5, 20, 0, 16, 1, 15, 7, 22, 2, 17, 28 }	Set 1 = { 0, 3, 6, 9, 12, 15, 18, 21, 24 } Set 2 = { 1, 4, 7, 10, 13, 16, 19, 22, 25 } Set 3 = { 2, 5, 8, 11, 14, 17, 20, 23, 26 }
Delta	Set 1 = { 6, 9, 12, 15 } Set 2 = { 7, 10, 13, 16 } Set 3 = { 8, 11, 14, 17 }