

ÅÖ: ○ = Oslo Manual; ±â¹ÝÇÑ ¼³¹®Á¶»ç, △ = μ¶ÀÛÀÛÀÛ Çö/ÁÁ¶»ç ¼Ç/Á
 ÅÛ: á: OECD(1994), OECD(1999a), OECD(1999b), Archibugi et al.(1994)

1997³â¿ j °³ÁμÈ Oslo Manual; ±â¹ÝÁ» μÎ¾¶ ¼ÇçμÈ CIS II Á À · 13°³±¹ÀÇ 4, ¿°³ Á!Á¶
 ¾Á¼¿ j ´èÇØ 1994 j -1996³â° ÈÀÇ Çö/ÁÈ°μ¿¿ j °üÇÑ μ¶ÀÛÀÛ, | Á!°øÇÏ¿´Ù. CIS II¿¼ Á Á!Á¶¾»Ó
 , , ¾ÈÏ¶ó ¼°ñ/º °Î¹®¿ j ´èÇÑ Á¶»ç° j ÀÏ·ç¾Á³·Ù. ¶ÇÑ CIS I¿ j °ñÇØ , ¹À° ±¹° μèÀÏ Á¶»çÈ°μ¿
 ¿ j Áü¿ÇÏ¿´Ù. CIS III Á 1998 j -2000³â Çö/ÁÈ°μ¿¿ j ´èÇØ 2001³â°ÏÁÏ ¼Çç Á ÁÁÏ·Ù. CIS III¿¼
 ´Á ±â¼¿Çö/Á°ú °ñ±â¼¿Çö/Á° ÈÀÇ ±, °ÐÀ» ¾È-ÇÏ¿° °ñ±â¼¿Çö/ÁÈ°μ¿¿ j ´èÇÑ Áú¹®Á» ´â°í ÁÖÁ,
 , ç, Çö/Á°ñ¿è» °, ´Ù ¼/ºÐÈ-ÇÏ¿´Ù. ÀÏ·Á Çö/Á ÁÛ¼¿ j °B°íÇÑ °³³âü ±â¹ÝÁ» °; ÁöÁö , øÇB·Ù Á
 ÁöÁü°ú ÁÏÁü±¹Áö μÎ Á±· ÈÀÇ ¼³¹®øçèÀ» ÁèÇØ °³° ±¹° j³· È±À° ±¹° j° È¿ j ÁÀ·äÛμèÀÏ ÁÏ°ü¼º ÁÖ
 °Ö ±â¼¿Çö/Á°ú °ñ±â¼¿Çö/Á°ÁÇ Á±ÁÏ, | ÀÏøÇÏÁö , øÇÏ°í ÁÖ·Ù Á ÁöÁü» ¹Ý¿μÇÑ °á°úÀÏ·Ù.

Çö/ÁÁöÇ¶· Î¼ ±â¼¿Çö/Á¶»ç·Á ´Ù¼¿ú °°° ÀÇÀÇ, | °; Áø·Ù. ÖÁú ±â¼¿Çö/Á¶»ç·Á °æÁ! Áü¹Ý
 ¿ j ´èÇÑ Áè°èÁ¿, | μ¶ÁæÇÑ·Ù. ÀÏ·Á ±âÁ, ÀÇ Çö/ÁÈ°μ¿¿Ç Æ¼º ¹× °»Áü» Á¾³ÇÇÏ·Áμ¶ ÁÖ·Î »ç¿èμÇ
 ¾Á·ø »ç·È¿±, ³ª ±¹°ÏÁü ¿±¿¿Í °ñ±³ÇÏ¿° °-Á¿» °; Áö·Á °Ï°ÐÀÏ·Ù. ´Ù¼¿, ·Î ±â¼¿Çö/Á¶»ç·Á
 ±â¾¿» ÁöÁ±·ÛÁ· Î ÇÑ·Ù(ÁÖÁ¼Áü Áç±Ù¹ý, subject approach). ÀÏ·Á Çö/Á ÁÛ¼¿ j ´è»öÁ, ·Î ÇÏ·Á Áç
 ±Ù¹ý(´Á¼Áü Áç±Ù¹ý, object approach); °ñÇØ Çö/Á Áü¹Ý¿ j ´èÇÑ Áç±Ù°ú ±¹°°ñ±³¿ j ÁÖ¾¿ ¿èÀÏ
 ¼º» °; Áø·Ù. ¶ÇÑ ±âÁ, ÀÇ Áè°èÁ¿¿Í Á´P, ® ±â¼¿Çö/Á°ú °ü·ÁμÈ , ðμÇ È°μ¿¿» ÁöÁ±ÇØ ¼º ÁÖ·Ù. Áí
 R&D ÀÏ¿ÛÀÇ °ñR&D Çö/ÁÈ°μ¿¿ j ´èÇÑ °ñ¿èÀ» ÁÁÁ±ÇÑ·Ù Á Áø, è¿¼ ±âÁ, ÁöÇ¶¿Í Á±°°¼º» °; Áø
 ·Ù(Smith, 2002). ¶ÇÑ ¼°ñ/º °Î¹®ÁÇ Çö/ÁÈ°μ¿¿ j ´èÇÑ Áè°èÁ¿, | Á!°øÇÑ·Ù Á Áø, è¿¼¼·μ Á« ÀÇ
 ÀÇ, | °; Áø·Ù.

<Ç¶ 2> ±â¼¿Çö/Á¶»ç·ÁÇ ¼³¹® °-¼º¿Í ÁÛ: á ÇüÁÁ

°-¼º±×·î	¼³·í	ÅÛ: á ÇüÁÁ
ÁÏ¹ÝÁ°°	¾Á¾ ±â¾·ÇüÁÁ, °¿èÀÛ/ö, Àç¹ »øÈ², ÁÏ¹øÇØ°	metric,
Çö/ÁÈ°μ¿	Á Ç°, ¼°ñ/º Çö/ÁÁÇ ¼øÇ¿°°Ï, °ñ±â¼¿Çö/Á ¼ÇÁüÀÇ ¿°Ï	binary
Çö/ÁÁÇ ¾ÁÏμø¾¿ ¿øÁμ	±â¾³»°°Ï, ¿ÛÏ±â¾³·¹× ¼ÁÁ, ´èÇØ ¹× ¿±¿¼, ÁÏ¹ÝÁ°°, ÁÁ¼Ç Çö/Á±¿Ç·Áμμ	ordinal
Çö/Á·ñÁü	¼ÁÁáÁÇÁ, °ñ¿èÁý°, ±ÖÁ¿·èÁÁ μÎ	ordinal
±â¼¿È¹μæ¹× ÁÏÁü	ÆÇá, ¶óÁÏ¼º/º, °èÇÏ¿¿ μÎ ±â¼¿ÁÏÈP ¹æ/ÁÏ³ª Çü·Á μÎ	binary
±â¼ºÈÈ/ø·Ù	ÆÇá, μðÀÛÁÏ °¹Áæ¼º, ¼ÁÁá¼Á¿ μÎ	binary
R&DÈ°μ¿	»ç³»¿Û R&DÁöÁá, ¿±¿ÁÏ·Á±Ö, ð, Áü´æÏ¼·Á¹« μÎ	binary, metric
Çö/ÁÁÇ Áá¾¿·äÁÏ	»ç³»¿äÁÏ ¹× °æÁ!Áü ¿äÁÏ	ordinal
Çö/ÁÈ°μ¿Ç ¿μÇá	Çö/ÁÁ Ç°ÁÇ, ÁÁá¾³·¹× ¼ÁÁá¾³·¹× °ñÁB	metric

¶Ç·Ù, ¶ Áø, èÀ° ±¹°Á!ÁüÁ, ·Î Ç¶ÁÖÈ-μÈ ¹æ¹ý·Ð, ¼³¹®Áö¿ j ±â¹ÝÁ» μÎ¾¶ ÁøÇçμÈ·Ù Á Á¿ÁÏ·Ù. μü
 ¶ó¼ ±¹° j° È °ñ±³° j °; ÈÇÏ·Ù Á °-Á¿» °; Áø·Ù. ¶ÇÑ ÁÖ±âÁüÁ, ·Î ÁøÇçμÇ°í Á¿ÁöÁüÁ, ·Î ¹®Á!Á¿
 À» °³¼±ÇØ °; Á´³è·ÁÁ» ÁèÇØ ¼Á°è¿- °Ð¾ÁÏ °; ÈÇÑ ÁáÁ¿μμ ÁÖ·Ù. CISÀÇ °; Èº¿¿ j ´èÇÑ ÁÏ¼ÁÏ
 È°èμÇ, è¼±¹°Á!ÁüÁ, ·Î Oslo Manual; ±â¹ÝÇÏ¿° Á¶»ç, | ¼Ç/ÁÇÏ·Á ³ª¶óμèÀÏ È°èμÇ°í ÁÖ¾¿ ±¹

Á!° £ °ñ±³° j´É/PA° Á;Á÷ È°èµÉ° ÌÀ, · Î Àü, ÁµÈ·Ù, , ¶Áö, · À, · Î, ±â¼Çö/ÁÈ° µ¿ÀÇ ÁöÀÖ¿ä/Ö¿Í ¼°
°ú¿ä/Ö, | ¿·° è/ÁÁ³ ¼° ÀÖ·Á °ÁÇ À·ÁÇÑ Áè° èÁ;ÁÌ, Ç, ÆÈ÷ ±â¼ÀÇ ÁÌ¹Ý ÇöÈ²(ÁÇ¹«ÇöÈ², ±â¼±Ö
, ð µî)¿; | ´èÇÑ ÀÜ· ¿¿Í Çö/ÁÈ° µ¿À» ¿·° è/ÁÁ³ ¼° ÀÖ·Ù·Á ÀáÁ;Á» °; Áø·Ù, µû¶ó¼ ±â¼Çö/ÁÁ¶»Ç·Á
R&D³ª ÆÇ¿¿Í °°À° ´Ù, ¥ Çö/ÁÁöÇ¿¿Í °ñ±³Ç¿¿° ±â¼ÀÇ Çö/Á° úÁÀÇ °»ÁúÀ» ±Ö, íÇÍ·Áµ¥ °; Áà ÁÁ
À° µ¥ÁÌÁÍ, | Á!° øÇÑ·Ù° í ÇÒ ¼° ÀÖ·Ù.

Áö±Ý±ÍÁö ¿Í· áµÈ CIS I, II µ¥ÁÌÁÍ·Á ¿±, ÀÜµé¿; °° °°³µÈÀ, · Î¼Á ÀÌ, | È°¿èÇÑ ¿±, µéÀ» ÁèÇØ
Çö/ÁÁ·Á¥ Áü¹Ý¿; | ´èÇÑ °ü/É»Ç¿×° ú ±×° £ÀÇ Çö/ÁÁÌ· ÐÀÇ ¼ÇÁöÁü °ÈÁö¿; ±¿¿Ç¿¿° ¿Ö·Ù, Áö³- 10¿
³ª µ¿³Æ Çö/ÁÁÇ ÁÌ¹ÝÁüÁÌ Æ·¼°(ÁöÀö±, Á¶, »èÁàÐÁÍ, ±â¼ÁÌÀü Á°° Èà, S, °í¿è µî) »Ö, ¼ÆÍ¶ó
È-ÇÐ, ÀÇ³æÇ°, ±â° è/ ¿£Áö·Í³¼, µ Á°° Áè/Á µî ´Ù³ÇÑ °Í¹¿; | ´èÇÑ ¿±, °; ÁöÇµÇ³¼·Ù, ±â¼Çö/Á
Á¶»Ç·Á Çö/ÁÁ¶»Ç ÁÜÁ¼ Í¼· Á« ÀÇ¹Í, | °; ÁöÁö, ±× µ¥ÁÌÁÍ, | È°¿èÇÑ, ¹À° ¿±, µéÀÌ Á·Á¥° áÁ¿¿; |
¹Ý¿µµÉ ¶S °, ´Ù Á« ÀÇ¹Í, | Áö·Ñ·Ù, µû¶ó¼·Á ±ÜÁ° ±â¼Çö/ÁÁ¶»Ç °°á° ú°; Áö±Ý±ÍÁö ¼¶¶»°Ö Çö/Á
¹× Á·Á¥¿±¿¿; È°¿èµÇ° í ÀÖ·ÁÁö, | ¼°°ÇÖÀ, · Î¼± ±â¼Çö/ÁÁ¶»Ç¿¿; | ´èÇÑ ÁÌÇØ, | °öÁÌ° í °, ´Ù, ¹
À° ¿±, ÀÜµéÀÌ °ü/ÉÀ» °; Áú ¼° ÀÖ·Á °è±à, | Á!° øÇÍ° íÁÚ ÇÑ·Ù.

2. ±â¼Çö/ÁÁ¶»Ç µ¥ÁÌÁÍÁÇ È°¿è

Áö±Ý±ÍÁö EU·Á CIS Áè°è, | È°¿èÇÑ °°°ö±¿ö ¹× Çö/Á° ü·Á ¿±, , | Àü±ÖÁüÀ, · Î Áö¿øÇ¿¿° ¿ÖÀ,
, Ç, OECD ¹× ¿°· ¿±, ±â°ü¿;¼·Á ÀÌ, | È°¿èÇÑ ¿±, °; ÁöÇµÇ³¼·Ù, ÀÌ· ÇÑ ¿±, µéÀ° ´Ù³ÇÑ Áø
, ¿¿;¼· »ìÆ°¼¼¼° ÀÖ·Ù, ÖÁü µ¥ÁÌÁÍ ¼Á±â°°· Î CIS ÀÌÀü, CIS I, CIS II· Î ³ª- ¼°µµ ÀÖÀ, , Ç, °Ð
¼°° ¹üÁÖ¿; µû¶ó ±¹° í° £ Á·ÀÌÀÇ ¼·¼Áü °Ð¼°, Æ·Á« »è¼¿¿¼·Á ÀÇ Çö/Á° Ð¼°, ±¹° í³» Çö/Á±, Á¶ °Ð¼°,
Çö/ÁÁÇ Æ·¼°¿; | °üÇÑ °Ð¼°, · Îµµ ³ª- ¼° ÀÖ·Ù, ¶ÇÑ µ¥ÁÌÁÍÁÇ ¼ö¿áÁÖ¼°¼). Îµµ ³ª- ¼° ÀÖ·Ù,
¿±±¼·Á·Á Guellec & Pattinson(2001)Á» ÁüÁ¶Ç¿¿° ±â¼Çö/ÁÁÇ ÁöÁ± ¹× ÁöÇ¿¿Í °ü·ÁÇ¿¿° ÁÖ¿ä ÀÌ
½°°; µÇ³¼·ø ¿±, ³»¿¿¿; µû¶ó ±×° £ÀÇ ¿±, °°á° ú, | »ìÆ°° ° íÁÚ ÇÑ·Ù.

°; j. Çö/ÁÁöÁ± ¹× °ñ±³

±â¼Çö/ÁÁ¶»Ç °°á° úÀÇ Á¹¹öÁ° »¿¿è¿µ¿° À° Çö/Á È°À° Çö/Á° ñÀ²ÀÇ ÁýÇÖÁü ÁöÇ¿, | Á!·ÁÇÍ·Á °Í
ÀÌ·Ù, ÀÌ· ÇÑ ÁöÇ¿·Á Æ·Á«è¼¿¿¼·Á È°À° Æ·Á± ±â¼±Ö, ¿¿¼·Á ´Ù, ¥ ³ª¶ó¿¿Í °ñ±³Ç¿¿° ÇÑ ±¹°; ³ª

4 ±â¼Çö/ÁÁ¶»Ç¿; | ÀÇÇØ ¼°áµµÈ Áè°èÁü ÁÜ·áÇ ÁÖ¿ä ÀÌ¿èÁÜ·Á 5°³ ±×, íÀ, · Î ³ª- ¼° ÀÖ·Ù(NESTI, 1994). Á¹Á° ±¹
°; Á·Á¥° áÁ·ÁµÈ·Í¼·, ÁÌµéÀ° ¿±, °³¹B ÇÁ· Í±×· ¥ÁÍ³ª »è¼·Á·Á¥Ç Áü·Áü °³¹BÁ» ÁÇÑ Çö/Á ÁÐÁÍ, ¼°° ú ±×, °° í ¿Ü
±¹° úÀÇ °ñ±³, ±×, °° í Á·Á¥Ç È¿°ü/É Áö·è¿; | °ü/ÉÀÌ ÀÖ·Ù, µñ°°, Áö¿ª Á·Á¥° áÁ·ÁÜ·Í¼·, ÁÌµéÀ° Áö¿·ÀÇ Çö/Á ÁÐÁÍ·ú
Áö¿·Áü ÁÌÇÁ¶óÀÇ ¿µ¿á µî¿; | °üÇÑ °Ð¼°Á» ÇÈ¿ä·Í ÇÑ·Ù, ¼°°, °°á | ¹× Á·Á¥° Ð¼°ÁÌµ¥, ÁÌµéÀ° ¼ÇÁüÀÇ ¼ÇÁö µ¥ÁÌÁÍ, |
¹ÜÁÁÁ·Í Çö/Á, ±â¼ÁÌÀü, °°á·Á·Á °°á | ¹BÁü¿; | °üÇÑ °Ð¼°¿¿; | °ü/ÉÀ» °; Áø·Ù, ³ÝÁ·Á ±¹° íÀÇ Çö/ÁÈ° µ¿·ú ¿·¿¿; | °üÇÑ
ÁÌ¹ÝÁüÁÌ ¿±, »ÇÇµéÀÌ·Ù, Áí ±â¼¹ ¹× Çö/ÁÁ·Á¥° ú °ü·ÁÇÑ ÁÌ½¿¿; | ´èÇØ ´éÁöÁü ³¹ÀÇ, | È°ÁÇÍ·Áµ¥ È°¿èµÈ·Ù, ¶Áö
, · À, · Î ±â¼·Á» µé ¼° ÀÖ·Áµ¥, ÁÌµéÀ° ÁáÁÇÁü ¼ö¿äÁÜ·Í¼·, Æ·Á« »è¼· ¹× Áö¿ª³»ÀÇ ¹BÁüµ¿Ç°Ð¼°¿¿¼·Á CIS µ¥ÁÌÁÍ, |
ÁÌ¿èÇÑ benchmarking ¼·°ñ/±±ÍÁö °ü/ÉÀ» °; Áú ¼° ÀÖ·Ù.

·Ù.

Brusoni et al.(2002) Á ÁÚµáÈ-µÈ Áö/ÄÇüÁÁ° ; ±â³/₄ × ±¹° ; ÄÇ Çö/ÁÁú ¼° ú ; Á°¼ÇÏ Áµ¥ ¹ÏÄ ; Á ç°ÇÖ ; 'ëÇØ ³íÄÇÇÏ ç·Ù. ÀÏµéÁ° ÁÚµáÈ-µÈ Á° ; 'Û, ¥ °Ï¹° ; ¼-ÄÇ Çö/Á° ú Çö/Á/Á/²/²ÁÚ ; ¾Ä ¶»° Ö ±â¿ÇÏ ÁÁö ; »ìÆ° ; ±â ÄŞÇØ °³° ±â³/₄ ç ; ¼- ÁÚµáÈ- ¼Ø/²ÄÇ »ç¿ë° ú Çö/Á/Á/²/²ÁÚÄÇ È°»é. Á °ÉÄÇ °ü°è ; Á¶»ÇÇÏ ç·Ù. Kaiser(2002) Á µ¶ÄÏ CIS ÎÄÇ ¼-°ñ/² × Á!Á¶³/₄ °Ï¹° µ¥ÄÏÄÏ ; ÀÏ¿ÇÇÏ ç° ±âÁ ÄÇ Áö/ÄÈ°»é 'ë, °-¼° ; °³° çÇÏ í Áö/ÄÈ°»é°-¼° ; ±, ¼°ÇÏ Á 'ë³ÆÁÚ ¹æ¹µéÄÇ Áú» ç- ±, ÇÏ ç·Ù.

ÇÑÆ Tether(2002) Á çµ±¹ÄÇ CIS Îµ¥ÄÏÄÏ ; È°çè, Çö/Á±â³/₄° ú ±µµéÄÇ °æ±ÄÛ³ª ¼Ø°ñÁÚ¿ÄÇ Çù. Á ÆÄÏÄ» ç-±, ÇÏ ç·Ù. ç-±, °á° ú Áú±±â¼/µ ¼-°ñ/²±â³/₄° µ¶ÄÛÁÏ Çö/ÁÁ» ¼-ÈÇÇÏ ç·Ù, ¼ÄÄá ÁÖÆÄÏ Ç°°³¹° Æ° ú °Á° ³ðÁ° ÁúÄÇ Çö/ÁÁ» Á±, ÇÏ Á ±â³/₄° ; 'Û, ¹Á° Çù. Ä¿-±, ; ¼°ÇÇÇÏ í ÁÖ¼/µ ç·Ù. µú¶ó/¼ Çö/ÁÁ» ÄŞÇÑ Çù. ÄÄÇ Áµµ Á ±â³/₄ÄÇ ÇùÁÄ¿ Çö/ÁÄÇ ¼° Ý(¼/² èÄÖÆ, ±¹³»ÄÖÆ µÏ) ç ; µú¶ó °áµµÈÄ» ¾È ¼° ÁÖ¼/µ ç·Ù.

Crepon et al.(1998) Á° R&D°ñ¿èÄ» Æ:ÇÇÏ Á ç° - °-¼°µé° ú »ý»è¼/²ÄÇ °ü°è ; 'ëÇÑ È, ±Ï°Ð/° Ä» ¼-ÄµµÇÏ ç·Ù. ÁúÁÚ Á »ð. Ó° Á³ª °³/µµÈ Á!Ç°ÄÇ, ÁÄÄÏ ±â³/₄ÄÇ ç-±, ³è. ÄÄ» ÁóÁó/ÁÄ²·Û Á »ç¼/Ç Ä» ¹çù·Ù. ÀÏ¿Í ÇØ²² 'R&D° ; Çö/ÁÁ» ÄŞÇÑ Á-ÄÏÇÑ ç·Ù° ; ¾Æ Óµµ ÁóÁúÇÏ ç·Ù. ÀÏ. ÇÑ ±âÁ¶ Á Smith(2000)ÄÇ ç-±, °á° ú ; ¼-µµ °, ÁÏ° í ÁÖ·Ù. ÀÏ ç-±, Á Áö/Á° á! ç ; 'ëÇÑ ç° - ÁÖÄµµÈÄ» Æ° ; ÇÏ ° í CIS I µ¥ÄÏÄÏ ; È°çèÇÏ ç·Ù. ç ; ¼-ÄÇ Áö/ÁÄÇÄ¿ ; 'ëÇØ ¼/ÇÁóÁú °Ð/°Ä» ¼°ÇÇÇÏ ç·Ù. °Ð/° °á °ú, R&D°ñ¿è° Á« °ñÁßÁ» Á-ÁóÇÏ±ä ÇÏÁó, Çö/Á°ñ¿èÄÇ ÁÏ°ÏÄÏ »ÖÄÏ° í °ñR&D°ñ¿èµµ »ó çÈ± Áß¿ÇÏ, ç, ÆÈ± »è³/₄° ç ; Çö/Á¿ ; ÁÖ¼/µ Áó/Á° ú ÇÐ/°ÄÇ ç°ÇÖÄÏ Áß¿ÇÖÄ» °, ç ç·Ù.

·Ù. Çö/ÁÄÇ °á!Áú çµÇá

Çö/ÁÄÇ ±Ä±ØÁÚÁÏ, ñÁúÁ° °á!Áú çµÇá» ±Ø°èÈ-ÇÏ Á °ÍÄÏ·Ù. µú¶ó/¼ Çö/Á° ú °á!Áú çµÇá° úÄÇ °ü°è Á Áß¿ÇÑ °ü/Æ»ç ÁßÄÇ ÇÏ³ªÁÏ·Ù.

Çö/ÁÄÏ »ý»è¼/² ç ; ¹ÏÄ ; Á çµÇá ; 'ëÇØ Çö/ÁÁ¶»ç° ; ¼°ÇÇÇ±â Áú ; µµ R&D° ; ±â³/₄ÄÇ ¼°°ú ; ¹ÏÄ ; Á çµÇáÏ³ª ÆÇÄÄ¿° úÄÇ °ü°è ; 'ëÇØ/¼ ç-±, ° ; ÁóÇÇµÇ³/µ·Ù. ÀÏµé ç-±, µéÁ° ±â¼/µÇö/ÁÄÏ ±â³/₄ÄÇ ¼°°ú ; ¾ÇÄÇ »ó°ü°è, ; !Áú» °, ç·Ù. Çö/ÁÁ¶»ç ; ÀÏ¿ÇÇÑ ç-±, ç ; ¼-µµ °ñ/ÄÇÑ °á. Ðµé ÀÏ µµÄµÇ³/µ·Ù. Çö/ÁÁ¶»ç µ¥ÄÏÄÏ ; ÀÏ¿ÇÇÏ ç° ¼°ÇÇÇÑ ° ; Á» Æ° ýÁÚÁÏ ç-±, Á µ¶ÄÏ Áß/ÖÆ° èÄ» ç ; ÄÇÇØ CIS II µ¥ÄÏÄÏ ç·Ù ç-° ç »ý»èÄ¶»ç(Production Survey), ; ÀÏ¿ÇÇÏ ç° ¼°ÇÇÇ³/µ·Ù. ÀÏ Á '±â³/₄¼° °ú ; 'ëÇÑ Çö/ÁÄÇ Áß¿ç¼° (Klomp and van Leeuwen, 1999)ÁÏ¶ó Á °, ° í¼. Í Á»ÆÇµÇ³/µ·Ù. 8,000 °³ ±â³/₄ÁÚ. á ; ÀÏ¿ÇÇÏ ç° ÁúÁÚµéÁ° ÇØ ç±â° ç(1994-1996)ÄÇ, ÁÄâ³/₄ ¼°Á»-úÄ» µµÄÇÏ ç·Ù. ÁúÁ¼ ±â³/₄ ç ; 'ëÇØ/¼ Á Çö/Á±â³/₄° ú °ñÇö/Á±â³/₄° ç ;, ÁÄâ³/₄ Áó° ; Á-ÁÏ° ; ¾Äö, ; ÀÏ ; ¼/²ÇÏ ç° »ìÆ° ;, é Á-ÁÏ° ; ÁÖ¼/µ·Ù. °è. °° á!Áú °Ð/°Ä» ±â¹Ï, ·Ï ÇÏ ç° ÁúÁÚµéÁ° 'Çö/Á¼° úÄÇ ¼°ÁÖ° ; ÁÄá

» Áó° i; ÁB; äcñ » çac çµca» 1ÄÉ·Ù°í °á· ÐÁ°í ÀÖ·Ù(Guellec & Pattinson, 2001).

¶ÇÇÑ Çõ/Á; ´èçø Á±Á± áÁ±Á ùµèÀÌ ´øÁ° Á °; Áà °ó¹çÑ Áú¹® ÁBAC ÇÍ³ª· Á Çõ/Á° ú °í çÄcÁá° ú ÁÇ °ü° è; °üçÑ °ÍÀÌ·Ù. ÀÍ¹ÝÁùÀ. Í °æ|ÇÐ ÀÌ· ÐÀ ° Í¹/Á ¼öÁØ; ¼ Á±±áÀùÀ. Í °¼ ¶S Çõ/Á° ú °í çè° úÁÇ °ü° è; ¼ø·Ù°í °, °í ÀÖ·Ù. ÀÌçÍ °ü· ÄÇÌç® Klomp and van Leewen(1999) ´Á Çõ/Á±±á° ú °ñçõ/Á±±á° ç; ÀÇÇÑ °í çè/ÁÀ· ùÀ» °Ð/ÇÇÌç´´Ù. ±× °á° ú Çõ/Á±±á° ú °ñçõ/Á±±á° ç; °í çÄcÁ° ú Á² ÁÇ Á±ÁÌ· Á¹°ñçÑ ¼öÁØÁ¹/Á·Ù. °, ´Ù ¹¹/¼×. i; ´èçø/´ Á ¾° ÉAC Á±ÁÌ°; °, ÀÌ±ä ÇÍÁö, ÁùÁ¹Áù Á, Í ±× Á±ÁÌ· Á ÁÛ/Ð·Ù. °è. ®æ|ÇÐÁù Áç±ÙÀ» ÀÌçèçø Licht(EC, 1997, pp.139-140) ´Á µ¶ÁÌ° ú ±× ´ú¶µç; ¼ Çõ/Á° ú ±±á° ¼öÁØ; ¼ °í çÄcÁ° úÁÇ ¾çac °ü° è; | ¾ø/Á±±á° Á, ç, Á|ç° ¹× °æ±çõ/Á° °í çÄcÁá» ÀµçÑ·Ù°í °á· ÐÀ» °, ®í ÀÖ·Ù.

Greenan and Guellec(2001)Á° ±±á° ¼öÁØ° ú è¾¾ ¼öÁØ; ¼ ÇÁ¶ù/Ç CIS ¶µÀÌÁÍ, | ÀÌçèçø Çõ ¼ÁÁ. Í ÀÌçÑ °í çÄc °È-, | °üÁçÇÌç´´Ù. ÀÌµèÁÇ ç±, °á° ú; µ, £, é 15,000° ±±á° ç; ´èçø Çõ/Á ±±á° ¹× °Í¹® °ñçõ/Á±±á° ¹× °Í¹®, ´Ù ÀÌÁÙ, ®, | °, ´Ù, ¹ÀÌ ÁçÁçÇÌç´´Ù. ÇÑÈ, EIMSAC Áöçæ» Áèçø ÁçÇµÈ Cesaratto & Stirati(1996)ÁÇ ç±, ´Á ÀÌÁÁ, ® Á¹Á¶¾ °Í¹®; ¼ Çõ/ÁÁÌ °í çè; ¹ÁÌ· Á çµç; ´èçø ¼çÁöÁù ç±, | ¼ççÇÌç´´Ù. ç±, °á° ú ÁùÁ¹ÁùÀ. Í ´Á Çõ/Á±±á° ÀÌ °í çè; ¹ÁÌ· Á Èç °ú; °ñçõ/Á±±á° ú Á« Á±ÁÌ°; ¾Áö, ÁB/Ð±Ø, ÐAC Çõ/Á±±á° °Á° ´Ù, ¾ ¾¶² ±×. í°, ´Ù °í çÄcÁá ç; ¹° ±áç, | ÇÍ· Á °ÍÁ. Í ±á, çµ·Ù.

Á±Á±ÁÇ Èç° ú/º æ°; ´Á Á±Á± áÁ±Á ùAC ±±Á° °ü/èÀÌ ÀÖ· Á ÁÖÁ|ÁÌ°í, Çõ/ÁÁ¶ç´ Á °ñ±³; çÌÁ, | Á; ÇÍÁö, ¾Á±±ÍÁö· Á, í°³AC ç±, ÁÌ ÁçÇµÈ »óÁÁÌ·Ù. ÀÌÁÁ, ® CIS I Á¶»ç; ¼ ´Á ç® - Çõ/ÁÁ±±á° ç; ´èçÑ ±±á° ¹ÝÁÁ» Á¶»çÇÌç´´Ù. Pianta & Sirilli(1998)ÁÇ °, °í¼ ç; ÁÇÇÌ, é Çõ/Á±±á° ÁÇ ´è°Í° ÐÀ° Á, ÁçÇÌ· Á Çõ/ÁÁ±±á° µç° µç° ú ° ç° ú/º ÁÌ ¾ø/Á·Ù. 60%; Á±°Í±±ÁÌ ÁB; äçÍÁö ¾è/Ð·Ù°í ´äçBÁ, ç, 85%ÁÇ ±±á° ÀÌ EUÁÙ±Ý» ÀÌçèçÑ ÁùÁÌ ¾ø°í, 74%´Á ±ÝÁ¶ÁÌ/¾è/è(¼Á|), | ÀÌçèçÍÁö ¾è/ÐÁ, ç, 90%ÁÌ»óÁÌ R&DçÍ ±á/Á¼°ñ/º, °øø Á¶·P° ú Çõ/ÁÈ° µçÁÌ °ü· Á/º ÁÌ ¾ø·Ù°í ´çÇÌç´´Ù. ´è±±á° ÁÇ °æ; í ° ç Ç×, ç; ´èçø ° ç ç 30%, 50%, 60%, 70%ÁÇ °ñ±²Á» °, ç´´Ù. µ¶¶¾ EUAC ±á/Á Á±Á±ÁÌ ´è±±á° Á» ÁÖ ´è»óÁ. Í ÇÍ, ç °ÉAcÁù ÁÌ/¾è/è· Á ±±á° ±Ø, ç; Á±ÁÌ°; ¾Á¹Á» ÁB±çÐ ¼º ÀÖ ·Ù. Á·Ù±á/Á»è¾ÁÌ °, ´Ù Á±°ÍÁ±Áç; ¹Í°·çBÁ, ç, ´ÜÁ Á¾¾çç °óÁ° Çõ/Á°ñçèÁ» °; Áø ±±á° ÀÌ °, ´Ù Á±°ÍÁ±Áç; ¹Í°·çÇÌç´´Ù.

Arundel(EC, 1997, p.104)´Á Á·´ ÁùÁ¹ÁÇ CIS I ÁÛ· á, | ÀÌçèçÇÌç® ¼/¼ °; Áö ÇùÁÁAC °øøç±, ÁÇ Àçè/º ç; ´èçø °Ð/ÇÇÌç´´Ù. ±Ø, ø; Á-¼ö· Í, R&DÁ¾µµ; Áó° çç°ö· Í, ÁùÁ¼, ÁÁ¾¾; ¼ Çõ/ÁÁ| Ç°ÁÇ, ÁÁ¾¾ÁÌ Áó° çç°ö· Í °øøç±, ÁÇ ÁB; ä/º ÁÌ °ó·Ù°í æ°; çÇÌç´´Ù. Mohnen and Hoareau(2000)µµ Çõ/Á Çù· Á´è»ó ¹× Á±° ççÁµÁ. Í¼ ´èçÐ, Á±°Íç±, ¼ÖÁÇ Àçè/º Á» °Ð/ÇÇÌç± ÁS Çø CIS I Á±°, | ÀÌçèçÇÌç´´Ù. ÇÁ¶ù/Ç, µ¶ÁÌ, ¾ÁÌ· µµ, ¼è/èÁÌÁ» ´è»óÁ. Í çÑ ç±, ç; ¼ ´è±±á° Á° °, ´Ù °øøç±, çÍ ç° è/º Á» , ¹ÁÌ °; Áö, ç, Á±°ÍÁöçæ» ¹P· Á ±±á° ú Éçá, | ¼ÖÁ çÑ ±±á° ÀÌ °, ´Ù °øøç±, çÍ ±á¹èè ç° èµç¾ Àö/Á·Ù.

¶ó. Çõ/ÁÀÇ Æ¹/²

(1) Çõ/ÁÄÄÏ

»è³/₄° Çõ/ÁÄÄÏ; °üçÑ ç±, ^Á CIS ÀÌÀü; µµ ^Ü/çÑ Á°; | ÀÌ; èÇÌ; °, ^À° ç±; °; ÁóÇàµÇ ³/₄À, ç Pavitt(1984)ÀÇ ç±; °; ^èÇYÀüÀÌ¶ó ÇÒ ¼ò ÀÒ^Ü. »è³/₄Àü¹YÀÇ ±â³/₄Çõ/ÁÈ°µçç; ^èçÑ Á¶»çÀÌ CIS^Á ±µç³È ÀÌ. ç³/₄Áó ¼/¼Àü »è³/₄Çõ/Áç±, ^¹× ÀÌ· ÐÀ» ¼ÇÁóÀü, ^Î Áó, íÇÌ^ÁµY È°; çµÇ¹ í ÀÒ^Ü. EIMS; ¼/¼ Áó; çÑ ÁÈ±âÀÇ ç±; °, úÁ|µéÀ° , ^¹À° °æ; ì »è³/₄° Çõ/ÁÈ¹/²À» ç±; °, ÇÌ^Á °ÍµéÀÌ ^Ü/ò, | Á:ÁóÇÌ; ^Ü. ÀÌ¶S ç±; °; ¼òÇàµÈ »è³/₄À° È-ÇÐ»è³/₄(Albach et al., 1996), ÄÄÇ»ÁÌ»è³/₄(Malerba et al., 1996), ÀÇ³/₄»è³/₄(Sharp & Patel, 1996) µîÀÌ^Ü.

Marsili & Verspagen(2001)^Á °×^ú¶õµá Á|Á¶³/₄ç; ¼/¼ ±â¼üÁ¼| (technological regimes)ÀÇ Æ¹/² À» Á¶»çÇÌ; ^Ü. ±µéÀ° CIS II µYÀÌÁÌ, | È°; èÇÌ; ° PavittÀÇ ±â¼üÁ¼| °Ð·ù, | Á×¼/²ÈÇÌ; ^ÜµY, ç±; °, á°ú ±â¼üÁ¼| °ç; ç ±â¼üÁü °; ^É¹/²(technological opportunities)ÀÇ ¼òÁ° ú À^Áó, ^è ±â¼üÁü °; ^É¹/²Ç °»ÌÀü, çÜ^ÌÀü ¼ò¹/²ÀÇ °ÐÈ, ^è Çõ/ÁÀ» ÀSÇÑ »ò· Îç¹ °; ^É¹/²ÀÌ °³¹µçÇ^Á Æ^ÁçÑ ±ÈÀü µî , ^¹; Áó ÁB; äçÑ Á:ÁÌ; | ÀÖÁ¼» °, ç; ^Ü. µ¶¶ó¼ °Ð¼²Àü Æ²· Î¼ ±â¼üÁ¼| °; À^çÇÒÀ» ¼³, íÇÌ¹ í ÀÒ^Ü.

¼ÄSÁó(1999)À° ÇÑ±¹ÀÇ 1998³â ±â¼üÇõ/ÁÁ¶»ç µYÀÌÁÌ, | È°; èÇÌ; ° °ç »è³/₄ç; ¼/¼ ±â¼üÇõ/ÁÀÇ ±â È, | Á¹°çÇÁÓ^Á çÁµ°ú ±â¼üÇõ/Á ¼°ú, | ÀüÀ^ÇÌ^ÁµY ÇÈ; äçÑ ¼ò· ÜÀÌ ÀüÀ^¼|, | ÁB/ÈÀ, ^Î »è ³/₄° ±â¼üÇõ/ÁÄÄÏÀÇ Á:ÁÌ, | »ìÈ¹° ¼ò· Ü. ÀüÀÜ^Á »è³/₄, ¶¹Ü »ó· èÀüÀ, ^Î ^ó ÁB; äçÑ ±â¼üÇõ/Á çò Áµ°ú ±â¼üÀü ¼ò· ÜÀÌ Á, ÀçÇÌ, ç, µ¶¶ó¼ ÀÌ¹YÀü ÁóÇà¼/²À» °®^Á Á°ÍÁ:ÁµéÀ° »è³/₄°· Î Á:°Àü Èç°ú; | ÀÖÀ» ¼ò ÀÒ^Ü¹ ÁÖÀçÇÌ; ^Ü.

ÇÑÈ ÀÖ±µ µç¼ Á^· ¹/²ÁÌ; | ^èçÑ °ü/ÈÀÌ Áó· çµÇ, é¼ Á^· ¹/²ÁÌ ^¹× Áó; çÇõ/ÁÄÄÏ; | °üçÑ ç±; °, °; Áó°; íÇÌ¹ í ÀÒ^Ü. Evangelista et al.(2001)^Á CIS IÀÇ µYÀÌÁÌ, | ÀÌ; èÇÌ; ° Áó; çÇõ/ÁÁ¼|ÀÇ Æ¹/² °Ð¼²ÀÌ °; ^ÈÇÒÀ» °, ç; À, ç, Arvanitis & Hollenstein(1998)^Á 1996³â; | ¼ÇàµÈ ¼²S¼² ±â¼üÇõ/Á Á¶»ç °áú, | ÀÌ; è, Á^· ¹/²ÁÌ, | 5°³ Çõ/ÁÇüÁÁ· Î °Ð·üÇÌ; ^Ü. Æ^Á»è³/₄°ú ÀÌµé Çõ/ÁÇüÁÁ° ç; | Á Á:ÁçÀüÁÌ °ü°è; | ¼ò· Ü¹ í °á· ÐÁ³¹ í ÀÒ^Ü.

°Î¹°° Çõ/ÁÄÄÏ, ÆÈ÷ ¼/¼ °ñ¹/²±â³/₄ÀÇ Çõ/ÁÈ¹/² ^¹× ÈÄÄÏ; | ^èçÑ ç±; °, µµ ÁÖ; ä ç±; °, ÁÖÁ|ÁBÀÇ ÇÌ³¹ÀÌ^Ü. Evangelista & Sirilli(1998)^Á ¼/¼ °ñ¹/²°Î¹° Çõ/ÁÈ°µçÇ Æ¹/²À» °Ð¼²ÇÌ; ^Ü, ç, Hollenstein(2000)^Á ¼²S¼²ÀÇ CIS II Á¶»ç°áú, | ÀÌ; èÇÌ; ° ¼/¼ °ñ¹/²°Î¹°; | ^èçÑ Á^· ¹/²ÁÌ °Ð¼²; | ±â¹YÇÌ; ° ±â³/₄µéÀÇ Çõ/Á, ðµá(innovation mode), | ³¹°³/¼¹^Ü. 5°³ , ðµá^Á ^ÜÀ¼ ú °°· Ü, ^ç ±â¼ü ±â¹Y, °³×È²; çÁ°· ÁèÇÒ Á· Ü±â¼ü ±â³/₄, ^è IT±â¹Y, çÜ^ÌÀçÇÀü(outward-looking) °³¹BÀÜ, ^è ¼ÁÁâ ±â¹Y, °³»°ÍÁóÇÀü(inward-looking) Á; ÁóÀü Çõ/Á±â³/₄, ^è °ñ; èÁY°, °; íÁ; »ç¹/²±â¹Y °ç¼ Çõ/Á±â

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