With a foot in three separate regions as traditionally labelled, only recently has the Black Sea region come to be seen as an entity in its own right. Straddling parts of Western Europe, the FSU and the Middle East, this region has formed its own internal dynamic, with market growth based on both domestic demand and exports and considerable investment by a few dominant companies. We define the region to include Bulgaria, Romania, Turkey, Greece, Serbia, Albania and Macedonia.

The market for refined copper around the Black Sea has grown rapidly. We estimate refined copper use in fabricating at 636 kt in 2007. This is up from only 420 kt in 2001, representing a cumulative growth rate of around 4% p.a. While the rate of growth in copper use is similar to that in other regions on Western Europe's periphery, namely Central Europe and Middle East / North Africa, it is much higher than the sluggish 0.2% p.a. growth recorded in Western Europe itself. To some extent, the static market in Western Europe reflects the shift of fabricating to bordering countries to the east and south, these countries benefitting most from the core region's continued growth in the end use of fabricated products.

Recent investment combined with reasonable end market growth should ensure a continued volume increase in the Black Sea region copper value chain, despite the slowing of market growth in Western Europe. We forecast a rise in refined copper use of around 4% p.a. over the next few years. Though still lagging behind local requirements, we see faster growth in anode and refined copper output. We follow with a brief profile, country by country.

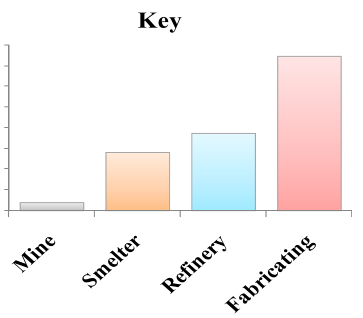
Bulgaria: This country has been a focus of investment in both copper production and fabricating. With significant mine production (62 ktpy capacity), the main focus has been further downstream. Bulgaria is home to the region's only large smelter /refinery, Pirdop. With major investment by owner Cumerio (now Norddeutsche Affinerie), Pirdop is a thoroughly modern facility with anode capacity of 275 ktpy. From July 2008 it is due to raise refining capacity to 180 ktpy (from 70 ktpy). The smelter / refinery upgrade was budgeted at €82 million.

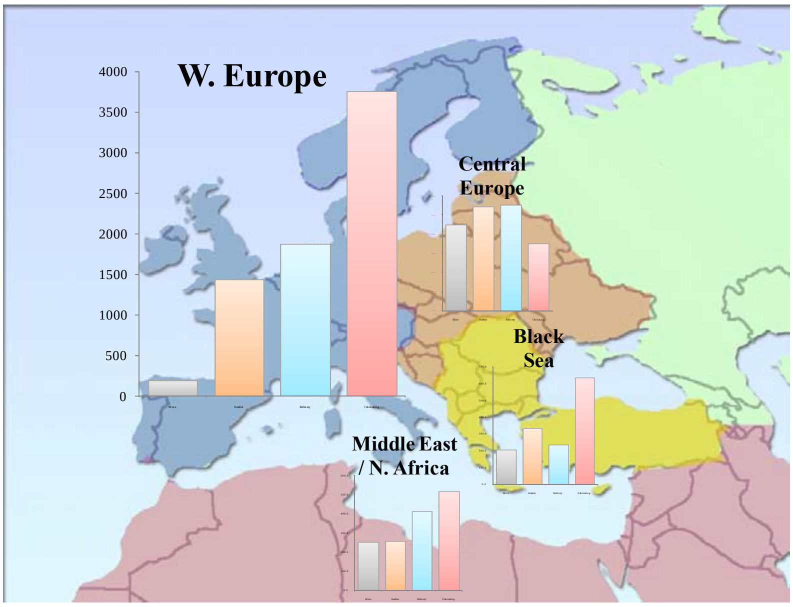
On the fabricating side, two cablemakers are integrated into wirerod, Energocabel (55ktpy capacity) and Cablecommerce (which this year has installed a second Rautomead line, giving it 12 ktpy capacity). The largest fabricator, however, is copper/alloy products company Sofia-Med (105ktpy capacity, currently being upgraded to 120ktpy). Sofia-Med makes mainly rolled products, but also makes rods, bars and sections. An 80% stake in Sofia-Med was acquired by the Greek fabricator Halcor in 2000. The company has since invested €85 million in upgrading this facility, transferring all of its rolled products fabricating from Greece. At present, utilisation in Bulgaria's fabricating facilities is low, at less than 40%. Total refined use is a little over 60 ktpy, of which Sofia Med accounts for around two thirds.

Greece: The country has no mine, smelter or refinery capacity, but it has a major fabricating industry. Copper use stands at around 170 ktpy, this figure having changed little over the past few years despite domestic market growth. The main reason is the transfer of production by Halcor to Sofia-Med in Bulgaria, including all of its rolled products output. Halcor is both a mill products company and, through Hellenic Cables, a cablemaker. Having rationalised its facilities, Halcor now has 155 ktpy of fabricating capacity in Greece, consisting of 70 ktpy tube, 25 ktpy rods, bars and sections and 60 ktpy wirerod. Competing cablemaker Fulgor Greek Electric Cables also has a 60 ktpy wirerod line.

Romania: The country's two mines have a combined 32 ktpy capacity. Downstream, the copper process chain is dominated by Cuprom, with 40 ktpy anode and cathode capacity at its Baia Mare refinery. Cuprom is integrated

Copper Profile of the Black Sea and the Greater European Regions (2007)





Figures represent output at various stages in the copper process chain.

Source: BME, ICSG

Black Sea Region Supply Chain Capacities

MINE	kt/a
Bulgaria	
Chelopech	10
Elatsite	45
Other	7
Subtotal	**62**
Romania	
Government Pb-Zn	16
Rosia Poieni	16
Subtotal	**32**
Serbia*	
Bor	10
Cerosa	10
Majdanpek	50
Veliki Krirelj	50
Subtotal	**120**
Turkey	
Cayeli	40
Others	30
Subtotal	**70**
Others	
Kukes etc (Albania)	4
Bucim (Macedonia)	12
Subtotal	**16**
Total	**300**

SMELTER	
Bulgaria	
Pirdorp	275
Elisema	14
Subtotal	**289**
Romania	
Baia Mare	40
Zlatna	20
Subtotal	**60**
Serbia	
Bor	50
Subtotal	**50**
Turkey	
Samsun	42
Subtotal	**42**
Total	**441**

REFINERY	
Bulgaria	
Pirdorp	70
Subtotal	**70**
Romania	
Baia Mare	40
Zlatna	20
Subtotal	**60**
Serbia	
Bor	50
Subtotal	**50**
Turkey	
Sarkuysan	100
Hendex	22
Others	40
Subtotal	**162**
Total	**342**

WIREROD	kt/a
Bulgaria	
Energocabel	55
Cablecommerce	12
Subtotal	**67**
Greece	
Fulgor Cables	60
Halcor	60
Other	5
Subtotal	**125**
Romania	
Elcond S.A.(Cuprom)	70
Subtotal	**70**
Serbia	
RTB Bor	35
Other	3
Subtotal	**38**
Turkey	
ER-Bakir	168
Garlpoglu Group	36
Hes Hacilar Elektrik	22
Ozel Elektrolilik Bakir	63
Sarkuysan	190
Others	30
Subtotal	**509**
Total	**809**

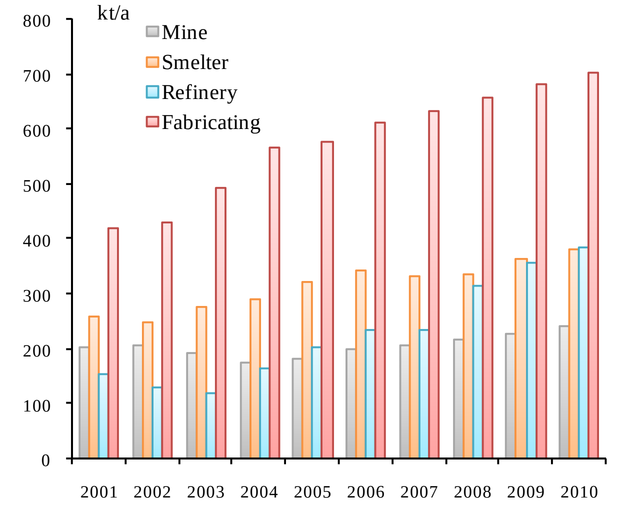
CU / ALLOY PRODUCT MILLS	
Bulgaria	
Sofia-Med JSC	105
Subtotal	**105**
Greece	
Halcor	95
Other	5
Subtotal	**100**
Romania	
Laromet	20
Other	10
Subtotal	**30**
Serbia	
Valjaonica Bakra Sevajno	50
FBC Majdanpek	12
FOM Prokuplje	10
Other	5
Subtotal	**77**
Turkey	
Emek Copper Melting	10
Elekrosan Elektrobakir	15
Elsan Hammadde Sanayi	16
Kaysler Copper Alloys	15
Ozur Metal Sanayi	15
Pireki Copper Alloys	15
Serbak Metal	15
Others	70
Subtotal	**171**
Total	**453**

TOTAL FABRICATING	
Bulgaria	172
Greece	225
Romania	100
Serbia	115
Turkey	680
Total	**1292**

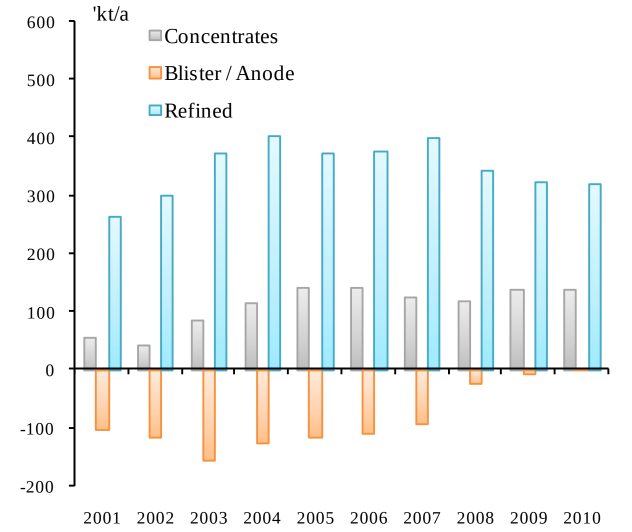
Source: BME, ICSG

Note: Serbia's estimated effective mine capacity is 50 ktpy.

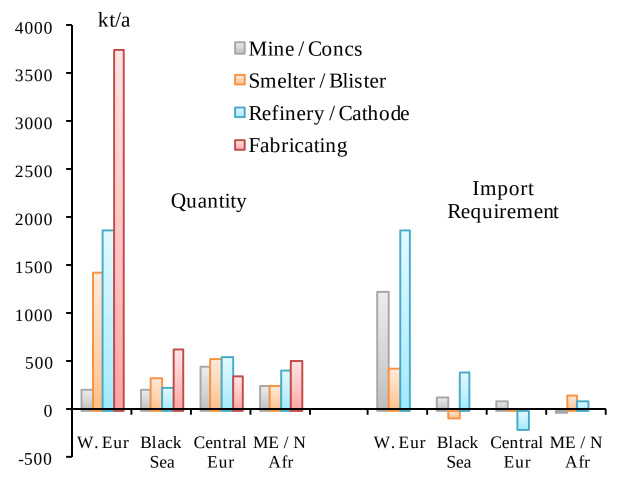
Development of the Black Sea Copper Supply Chain 2001-2010



Net Black Sea Import Requirements Along the Copper Supply Chain 2001-2010



The Black Sea Region in the Greater European Context (2007)



www.bloomsburyminerals.com

into cable thorough its subsidiary Elcond, which has a 70 ktpy capacity wirerod line. Cuprom had great ambitions in the region, having intended to acquire Serbia's RTB Bor. It failed to do this in April 2007 due to a lack of financial assurances. In Romania, Curpom's cable subsidiary competes with another Halcor company, Ecab. In copper /alloy products, the main Romanian supplier is Laromet, with 20 ktpy capacity.

Serbia/Other: Apart from small mines in Albania and Macedonia, state owned RTB Bor in Serbia dominates the former Yugoslav Black Sea area mining sector. RTB Bor is integrated downstream. The company has 50 ktpy mine capacity, 50 ktpy smelter and refinery capacity and about the same in fabricating. The long-intended privatisation of RTB Bor is currently on hold, as each intended suitor has either withdrawn or failed to raise the necessary finance. Huge commitment to existing labour force and required investment are the main stumbling blocks. In fabricating, RTB still runs an old Dipform wirerod line, with 35 ktpy capacity. Related cable facilities have been divested. On the mill products side, formerly dominated by RTB Bor, the main producer is Valjaonic Bakra Sevajno (50 kpty), which has received major investment by owners East Point Holdings and Amalco, with the help of EBRD grants. The tube mill FBC Majdanpek (12 ktpy) is also significant, while RTB Bor retains FOM Prokuplje, as privatisation of this facility failed in October 2007.

Turkey: Turkey has a significant but fragmented mining sector, with 70 ktpy capacity in total. The only smelter we have listed is Samsum (42 ktpy capacity). Refined capacity much exceeds this, at 120 ktpy. By far the largest refinery is Sarkuysan (68 ktpy), for which the main company product is wirerod. Competing wirerod producers, Er-Bakir and Has Hacilar, are also integrated upstream into refining

Turkey's fabricating sector is large, and fragmented. Sarkuysan and Er-Bakir are the country's two large wirerod producers. Sarkuysan has three wirerod lines, with 190 ktpy capacity in total. The company is integrated downstream into drawn wire and winding wire, and also makes copper bar and copper tube. Er-Bakir, with 168 ktpy capacity, has two wirerod lines, and also sells drawn wire products. The smaller wirerod producer Hes Hacilar (22 kpty) has a similar profile. Cablemaker Ozel Elektrolikik has a 63 ktpy wirerod line, while another cablemaker, Oznur Kablo has a 70 ktpy wirerod line now due to come on stream.

Even without the Oznur Kablo line, Turkish wirerod capacity is estimated at over 500 ktpy. On top of this, Turkey has around 170 ktpy mill products capacity. Halcor of Greece acquired a stake in this sector in March 2008 with the purchase of a 50.1% interest in tube and bar company Sega Bakir. While Turkey's fabricating capacity is huge, however, much is under-utilised, with less than 50% utilisation in 2007.

By Paul Dewison