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**The political economy of European expansion programs: the Anglo-Norwegian aluminium conflict 1967-70**

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*“You can’t mention aluminium you know without making Norwegians prick their ears up”*, an official at the British embassy in Oslo reported to his government in 1970.<sup>1</sup> He surely hit the nail on the head. Since 1967 the Norwegian government in Oslo had reacted strongly against the British government’s policy to expand domestic production of primary aluminium. The British policy would challenge the ambitious Norwegian expansion program. While producing 75.000 metric tons of primary aluminium in 1955, plans in 1958 called for an almost tripling of production capacity by the end of the 1960s. As production passed 167 000 tonnes in 1960 the expansion target was raised to 5-600,000 tonnes. By the mid 1960s it was fixed at 7-800.000 tonnes. The program never met the targets as production in 1970 was only 522.000 tonnes.<sup>2</sup> However, Norway had become a major producer of primary aluminium.

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<sup>1</sup> NA/PRO, FCO 30/698, Crossley to European Integration Department, Foreign and Commonwealth Office, 31 October 1970.

<sup>2</sup> Statistics Norway, Historical statistics 1994, Oslo-Kongsvinger 1995, table 16.6, p. 391. The volume of 800,000 tonnes was not reached until the second half of 1987. Total European smelter capacity increased from 860,000 tonnes in 1960 to 3, 5 million tonnes in 1976.

Having reached 617.000 tonnes in 1976, the country rated as the second largest producer in Europe.

The booming European aluminium economy in the 1960s was not only characterized by increasing vertical integration on the part of the major aluminium corporations but also a strong involvement of governments. National expansion programs added a distinct element of political economy to European aluminium business, under which companies and governments cooperated closely. From the 1950s Norway and France emerged as fierce competitors and in the 1960s also the Federal Republic of Germany and the United Kingdom launched expansion programs. The Norwegian expansion program largely targeted the British market. This met with success as in the 1960s the expanded Norwegian industry successfully replaced Canadian imports in the UK. Unsurprisingly, the Norwegians regarded the British program from 1967 as a profound threat to Norwegian policy. This caused an awkward political conflict among the two governments as Norway brought it into the political machinery of EFTA. The conflict also involved Aluminium Union Limited (Alcan), which was participated in the Norwegian as well as the British program.

The cost of primary aluminium production in the 1960s was generally estimated to be 43 % raw materials, 19 % capital charges and 15 % power.<sup>3</sup> Government policy instruments were tariffs, investment grants of different character and not least the subsidy of power supply. Norway's development path through the 20<sup>th</sup> century did go through aluminium. This grew out of the natural advantage of cheap hydro-electric energy. Conceptualized as regional policy the government provided financial investment aid and cheap energy to primary aluminium producers. In 1969 OECD experts estimated the various national cost structures of producing aluminium ingots in 1965. In terms of total factor productivity growth between 1955 and 1965 Norway came out on top because of the cheap electric power.<sup>4</sup> In the second half of the 1960s the British Labour government developed equivalent measures, however on the basis of nuclear power.

In order to reach a deeper insight into the character of the European political economy of aluminium in the 1960s, which is hardly investigated from the perspective of government

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<sup>3</sup> National Archives/Public Record Office (henceforth NA/PRO), London, Board of Trade (henceforth BT) 241/1744, Establishment of Aluminium Smelters in the United Kingdom. Report to Council by Deputies, 23 June 1969.

<sup>4</sup> OECD, *Non-ferrous metals. Gaps in technology*, Paris 1969, p. 109, table 45. The comparative estimates were calculated in 1965 US \$ at official exchange rates.

schemes, the paper investigates the two expansion programs as well as their escalation into an intergovernmental diplomacy of aluminium.<sup>5</sup> It also gives an impression of the political influence of the aluminium corporations, in particular Alcan's influence.

### **The Norwegian expansion program in primary aluminium**

The Norwegian Minister of industry, Kjell Holler, outlined the basic features of the Norwegian expansion programme in a memorandum to the cabinet in October 1960.<sup>6</sup> However, it originated in policy formulated back in 1954 to attract foreign direct investments into Norway by offering cheap energy supply. In the spring of 1954 cabinet members tried to persuade Baco, Pechiney and Alcan, all of which already had interests in Det Norske Nitridaktieselskap (DNN) while Alcan also had a 50 % share in the Norwegian Aluminium Company (NACO), to invest further in Norway. As this failed, in 1959 Mr. Trygve Lie, who previously had been the UN General Secretary and in 1963 appointed Minister of industry, was appointed member of the cabinet and assigned to procure foreign direct investments into Norwegian industry. The government would prefer that Norwegian and the foreign companies each owned 50 % of the stakes in the new companies.<sup>7</sup> While it called upon domestic companies to enter into joint ventures with foreign corporations, Mr. Lie allured them by offering cheap hydroelectric power. According to government estimates, in 1959 still only 25 % of Norway's capacity of hydro-electric power was utilised.<sup>8</sup> Thus the program was accompanied by a vigorous expansion of hydroelectric power capacity, mainly implemented by government agencies.<sup>9</sup> Simultaneously Mr. Lie was in close contact with industry majors in Europe and North America. As Norway had no bauxite deposits he contacted the large aluminium corporations in control of upstream production chains. He argued that Norway, as opposed to African countries, would provide political stability. He saw that this advantage might easily disappear and urged the government to quickly reach formal agreements with

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<sup>5</sup> Cf. also Hans Otto Frøland, "The Norwegian Aluminium Expansion program in the Context of European Intergration, 1955-1975, *Cahiers d'histoire de l'aluminium* Special Issue 2, 2007 pp. 103-124.

<sup>6</sup> Riksarkivet (National Archive, henceforth RA), Oslo, Industridepartementet (Ministry of Industry, henceforth ID), Utredningsavdelingen, (Planning Division, henceforth UA), box 17, Memorandum on the expansion of the aluminium industry, 11 October 1960.

<sup>7</sup> St.m. nr. 21, 1963-64 Om utenlandske eierinteresser i norsk industri (On foreign ownership in Norwegian industries), p. 16.

<sup>8</sup> St.m. nr. 6, 1959-60 Om utbygging av industrien i distriktene (On expansion of manufacturing industries in the districts), p. 6.

<sup>9</sup> St.m. nr. 6, 1962-63 Om utbygging av vannkraft og kraftkrevende industri (On the expansion hydro-electric power and power-based industry).

foreign partners.<sup>10</sup> As foreign corporations showed an interest, government planners started formulating a distinct program for rapid implementation. Karl Skjærdahl, under-secretary of state at the Ministry of industry, was in June 1960 assigned to formulate a detailed and coherent aluminium plan.<sup>11</sup> He discussed with the CEOs of the Norwegian companies Årdal og Sunndal Verk (ÅSV), Elektrokemisk (Elkem)<sup>12</sup> and Norsk Hydro, who endorsed the plan but clearly stated that they would prefer the foreign companies to be minority partners.<sup>13</sup> In March 1961 Mr. Skjærdahl submitted a detailed memorandum on three specific smelter projects at Karmøy, Lista and Husnes (cf. table 1 below). It also included the expansion of related hydro-electric power supply, which added up 10440 Gwh.<sup>14</sup>

As displayed in table 1 the expansion program resulted in the establishment of four new large aluminium smelters, all located along the coast of Norway.

**Table 1. New smelters under Norway's expansion programme**

Established	Company's name	Plant location	Norwegian owner	Foreign owner	Start - year	Production 1967	Production target for 1971 in 1967	Capacity 1975,	Targeted market
1956	Mosjøen Aluminiumverk	Mosjøen	Elkem 66 % 1963:50 %	AIAG 33 % 1963: Alcoa 50 %	1958	60.000	85.000	95,000	UK
1962	Sør-Norge Aluminium (Sørøst)	Husnes	DnC consortium 20 %	Alusuisse 80 %	1966	60.000	120.000	70,000	EC
1963	Aluminium Norge (Alnor)	Karmøy	Norsk Hydro 51 %	Harvey 49 %	1967	80.000	120.000	120,000	Domestic, UK

<sup>10</sup> RA, ID, UA, box 17, Report by Roar Melien from discussions on the aluminium industry on 2 September, 10 September 1960.

<sup>11</sup> Odd Gøthe, *Ærlig talt! Om industriskandaler, statsråder og annet*, Oslo 1988 p. 36f. Mr. Gøthe was a prominent aluminium planner in the Ministry of Industry.

<sup>12</sup> Elektrokemisk changed name to Spigerverket in 1971 and to Elkem in 1978. In this article it is referred to as Elkem.

<sup>13</sup> RA, ID, UA, box 17, Memorandum on the expansion of the aluminium industry, 11 October 1960 p. 8.

<sup>14</sup> RA, ID, box 233, Report nr. 1 from Utvalget for kraftkrevende industri (Committee for the expansion of power-based industries), 25 March 1961.

1967	Lista Aluminiumverk	Lista	Elkem 50%	Alcoa 50%	197 1		80.000	82,000	UK
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Source: compiled from several documents.

Mosjøen Aluminiumsverk originated in plans developed already in 1951 when the government took up discussions with the management of Elkem on the matter. Elkem formed a joint venture with Swiss AIAG (Alusuisse) after contact was established in 1953.<sup>15</sup> The smelter was established in 1956, came on stream in 1958 and produced 32,000 tonnes in 1960. The partnership with Alusuisse ended in 1962 after fairly dramatic negotiations, in which Mr. Trygve Lie was actively involved. Elkem had been preparing for the Lista Aluminiumverk since 1960, for which Alcoa subsequently was Elkem's preferred partner. At the early stage of discussions however, Elkem also wanted Alusuisse to join the Lista project as a third party. Discussions with Alcoa on the smelter project at Lista in 1961 easily spilled over to the Mosjøen plant. Alcoa in 1962 decided to replace Alusuisse while Elkem decided to reduce its control to 50 %.<sup>16</sup> Alcoa and Elkem set up the company Mosal to take care of the two smelters' sales. Alcoa provided the plants with alumina while Mosal supplied the British based aluminium fabricator Impalco with primary aluminium.<sup>17</sup> Impalco was half owned by Alcoa. However, in 1968 Alcoa and Elkem bought additional 25 % of the Impalco shares. Simultaneously the company's name was changed to Alcoa of Great Britain. Although established in 1967, not until 1971 did Lista Aluminiumverk come on stream.

When leaving the plant in Mosjøen Alusuisse invested in the Sørøst plant at Husnes in 1962. In close liaison with the government the commercial bank DnC organized a Norwegian consortium to build the smelter. As the bank failed to raise Norwegian share capital the joint venture was dominated by Alusuisse's 80% stake. The government must accept Swiss control over the plant. The agreement made Alusuisse Sørøst's principal agent. The smelter, starting production in 1967, by and large supplied the EC market.

Norsk Hydro established the Alnor smelter with the American Harvey Aluminium Inc. at Karmøy in 1963. Having in the first place discussed with Alcoa Norsk Hydro negotiated a

<sup>15</sup> Rune Pedersen, *Til Verket. Elkem Aluminiums historie gjennom 40 år*, Mosjøen 1997 p. 29.

<sup>16</sup> Knut Sogner, *Skaperkraft. Elkem gjennom hundre år, 1904-2004*, Oslo 2003, p. 161-168.

<sup>17</sup> Cf. Hans Otto Frøland and Espen Andresen, *Fra AIAG til Alcoa i Mosjøen*, in Johan Henden et al (eds.), *Globalisering gjennom et århundre. Norsk aluminiumindustri 1908-2008*, Bergen: Fagbokforlaget 2008 pp. 247-275.

contract with Pechiney in 1960, which however was never signed because the management would prefer Alcoa or Alcan as partners.<sup>18</sup> Thus Harvey was not the preferred alternative.<sup>19</sup> The agreement made Harvey receive 25 % of the production of primary aluminium. Much of the residual 75 % of production was supposed to be manufactured at Karmøy as the plant from 1968 also included a cable mill, a rolling mill and an extrusion plant. However, as Alnor in 1969 decided to set up an extrusion plant in Wales, the smelter came to direct more of its export to Britain. The Alnor smelter started production in 1967.<sup>20</sup>

The government program also encouraged the expansion of the existing smelting plants of DNN and ÅSV. DNN was established in 1913 by Pechiney. In 1923 Alcoa (from 1928 Alcan) and Baco joined the company, which operated reduction plants in Tyssedal and Eydehavn. As Pechiney left in 1958 Alcan and Baco had a 50 %-share each until the company was bought by Norsk Hydro in 1975. Together the two smelters produced 28,000 tons in 1962. Their expansion was however modest, and by 1975 capacity was 39,000 tons. Baco and Alcan tended to bring the produce to Britain, as displayed in table 2.

**Table 2. Smelter capacity of Det Norske Nitridaktieselskab (DNN).**

Plant location	Foreign owners from 1958	Total production 1967	Production target for 1971 in 1967	Capacity 1975	Targeted market 1967
Tyssedal Eydehavn	Baco 50 % Alcan 50%	30.000	40.000	39.000	UK

Source: compiled from several documents.

Of much greater importance was the expansion of the state-owned ÅSV, which was the largest aluminium company in Norway. The Norwegian parliament decided in 1946 to establish the smelter in Årdal, in 1951 also the smelter in Sunndal. The Sunndal smelter was on stream in 1954 while the Årdal smelter's capacity was expanded in 1959 and in 1961. 114,000 tonnes of the 186.000 tonnes that were produced in Norway in 1960 derived from

<sup>18</sup> Finn Erhard Johannessen, Asle Rønning, Pål Thonstad Sandvik, *Nasjonal Kontroll og Industriell Fornøyelse. Norsk Hydro 1945-1977*, Oslo 2005 pp. 233-240.

<sup>19</sup> The partnership with Harvey turned sour and Norsk Hydro in 1973 purchased Harvey's shares. The company's name was changed to Norsk Hydro A/S Karmøy Fabrikker.

<sup>20</sup> Cf. Also Pål Sandvik, "Et kaos uten sidestykke": Hydro, Harvey og joint ventures i norsk aluminiumsindustri, in Johan henden et al (eds.), *Globalisering gjennom et århundre. Norsk aluminiumsindustri 1908-2008*, Bergen: Fagbokforlaget 2008 pp. 277-295.

ÅSV's two plants. In 1947 ÅSV had concluded a rather generous long term barter agreement with Alcan, whereby alumina was exchanged for aluminium ingots.<sup>21</sup> This agreement was supplemented in 1951 and 1958, while in 1955 ÅSV also signed an equivalent barter agreement with Alcoa. With no bauxite deposits in Norway these agreements reflected the industry's profound dependence on the large foreign corporations in control of alumina.

In 1960 it was realized that ÅSV's expansion plans would meet an alumina supply deficit by 1965 under the existing contracts, which would expire around 1970. Therefore, when discussing a possible joint venture between the ÅSV and the American corporation Olin Mathieson in 1960-61 as part of the expansion programme, the latter offered to sell a share in the FRIA alumina plant in Guinea to ÅSV. This never materialized as the management of ÅSV preferred to deepen relations with Alcan.<sup>22</sup> In 1962 ÅSV increased the capacity at the Årdal plant by 40.000 tons a year (Årdal III) and somewhat later another 10,000 tons (Årdal IV). In 1967 the capacity in Sunndal increased by 50,000 tons (Sunndal III). Thereby ÅSV's capacity was increased from 114,000 tonnes in 1960 to 261,000 tonnes in 1970. As in the 1950s the expansions were partly financed by loans from Alcan and Alcoa.

However, the ÅSV chose to deepen relations with Alcan because of the corporation's increasing influence of the European fabricating market.<sup>23</sup> One third of ÅSV's production was payment to Alcan for alumina but the rest was sold to independent buyers in Europe and the US. In 1959 the former amounted to 23.000 tonnes while the latter 70.000 tonnes. In the early 1960s ÅSV's management as well as government planners were fairly pessimistic because they feared that demand for ingots would disappear as independent fabricating mills in Europe were bought up by Alcan, Alcoa and other majors. In few years ÅSV lost five traditional customers to Alcan, representing a sales volume of 50,000 tonnes yearly.<sup>24</sup> Thus the company had a strong interest in influencing Alcan's corporate behaviour. Talks had taken place with the Canadians since the early 1960s and in the autumn of 1965 the management decided to integrate with Alcan. The government was formally informed in February 1966. In December the Norwegian parliament decided to sell 50 % of ÅSV's shares to Alcan in exchange for cash

<sup>21</sup> Tore Grønlie, "Årdal verks oksydavtale med Alcan i 1947", *Historisk Tidsskrift* 55, 1978 pp. 139-194.

<sup>22</sup> RA, ID, UA, box 19, Note on the meeting of the working party on alumina on 10 January 1963, undated.

<sup>23</sup> On the relation between Alcan and ÅSV, cf. Harald Rinde, Alcan tur – retur, in Rolv Petter Amdam et al. (eds), *Verket og bygda 1947-1997*, Oslo 1997 pp. 134 – 163; Harald Rinde, "Global Mission and National Interest: The Business Partnership of Alcan Aluminium Ltd. and the Kingdom of Norway", in *Cahiers d'histoire de l'aluminium*, Special issue 21, 2007, pp. 83-99.

<sup>24</sup> Harald Rinde, "The Powerhouse of Europe", *Cahiers d'histoire de l'aluminium*, Special issue 1, 2003, p. 42.



and a 3 % minority share in the corporation.<sup>25</sup> The agreement explicitly made ÅSV the major supplier of ingots to Alcan's fabricating plants in Europe. This made the British market more important for ÅSV, which by and large had targeted sales markets outside the UK until then. In July 1968 Alcan and ÅSV agreed to expand the latter's capacity by further 50.000 tonnes. The agreement between ÅSV and Alcan was revised in 1969 as the ÅSV faced a stronger demand in Germany.

**Table 3. Smelter capacity of Årdal of Sunndal Verk (ÅSV)**

Plant location	Start-year	Ownership	Production 1967	Production target for 1971 in 1967	Capacity 1975	Targeted market 1967
Årdal	1948	Government	172.000	222.00	330.00	UK
Sunndal	1954	Alcan 50%				UK
Høyanger	Bought 1967	from 1967				Domestic

Source: compiled from several documents.

A smelter in Høyanger, owned by NACO and Alcan until it was taken over by the ÅSV in 1967, was expanded from a yearly capacity of 13,000 in 1960 to 26,000 tons during the first half of the 1960s. By 1975 it was only modestly expanded. This mainly supplied the Norwegian manufacturing market.

To sum up, the Norwegian expansion program largely targeted the British market.

### **The significance of the British market for Norway's smelters**

Alcan played a role, at least indirectly, when Norway already in the 1940s would start targeting the British market. Having negotiated the alumina-agreement with ÅSV and recognising the Parliament's decision in October to exploit the Aura waterfalls, in December 1947 Dana Bartholomew, who had served Alcan in Sweden during the war and later became Alcan's chief financial advisor, contacted the Ministry of Industry in Oslo to elaborate the smelter project in Sunndal. Alcan would carry a large part of the investment, provide alumina and technical service if the Government would supply cheap energy. Bartolomew informed

<sup>25</sup> In 1974 the government repurchased 25 % of the shares and in 1979 the residual 25 %.



that the smelter in Sunndal would serve the British market, where demand was excessive.<sup>26</sup> The 1948 negotiations with Alcan failed but their perspective found its way into Norway's long-term program for the OEEC, which was submitted in the autumn of 1948. Norway suggested a production of 95.000 tonnes in 1952 on the basis that the Sunndal smelter received Marshall Aid and started production that year. In November 1950 the OEEC non-ferrous metal committee adopted this target, however on the basis that Norway's expanding smelting capacity was adjusted to British demand.<sup>27</sup> The committee had estimated European production to be about 600.000 tonnes by the end of 1952 but, mainly because of British demand, a deficit of 235.000 tonnes would occur. On the committee's initiative the Norwegian and British governments in 1949 discussed to set up a formal agreement. The British certainly wanted aluminium from Norway but would not in any way compromise its agreement with Alcan. London rejected a formal bilateral agreement.<sup>28</sup> Nevertheless the British government requested more aluminium than Norway tended to offer.<sup>29</sup>

This was not least because of Alcan's own demand. Alcan was Britain's main supplier of ingots since 1939, when the Ministry of Supply concluded a long-term contract with Alcan in case of war. Only in 1943 the British government procured 220.000 tonnes of aluminium from Alcan's reduction plants in Quebec. Both parties wanted to sustain the cooperative relation when the war ended. Alcan's policy was to supply the British market not only with primary aluminium but also by offering all kinds manufactured utilities.<sup>30</sup> During the war Alcan had established three large corporations in the UK. Stand Ltd. took care of strategic holdings and overseas interests, including those in Scandinavia. Aluminium Union Ltd. [from 1959 Alcan (U.K) Ltd., which from 1967 also included Stand. Ltd., thereby introducing a unified management in the UK] was responsible of Alcan's trading activities in the UK, which until 1953 were under regulation of the Ministry of Supply. Aluminium Union Ltd. was also responsible for Alcan's alumina supply to Norway. Northern Aluminium Company [from 1960 Alcan Industries Ltd.] was an expanding semi-fabricator. Shortly after the war Northern Aluminium also bought the Rogerstone manufacturing plant, which Northern had built and operated during the war on behalf of the Ministry of Air Production. A rolling mill with

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<sup>26</sup> Riksarkivet, Industridepartementet, S-1411, Drogseths arkiv 1946-56, eske 20, mappe 2, Drogseths notat om konferanse med Bartholomew 23. februar 1948.

<sup>27</sup> Riksarkivet, Industridepartementet, S-1411, Statssekretær Drogseths Marshallplanarkiv, eske 28, Non-Ferrous Metals Committee, Report on the Study of Aluminium, Paris 2. November 1950.

<sup>28</sup> Alan S. Milward, *The Reconstruction of Western Europe 1945-51*, London: Routledge 1992 s. 202.

<sup>29</sup> RA, UD, box 3107, Note on Norwegian supply of aluminium to the UK in 1951, 19 February 1951.

<sup>30</sup> Campbell 1989 p. 454-456.

200.000 tonnes capacity was soon added to the plant while other mills such as the Banbury Works, were modernised. Thus Alcan also controlled much of British aluminium consumption. Demand for ingots was high while existing British capacity was fully exploited. Consequently, well into the 1950s Alcan supplied around 90 % of British aluminium consumption, most of which was shipped from Canada.<sup>31</sup> Very much in response to the expansion policy of the three other North-American aluminium majors, from the second half of the 1950s Alcan's strategy was to expand fabrication capacity. In 1944 Alcan operated only two fabricating companies in the UK. The number increased steadily so by 1975 it was 20.<sup>32</sup> In particular in the 1960s Alcan's policy was to buy British client's companies. This sustained Alcan's strong position on the British market.

In the 1950s Alcan tended to bring the 'barter-ingots' from DNN and ÅSV to its semi-fabricators in Britain. Yet the 'sales-ingots' of ÅSV was not shipped to the UK while the produce of NACO was retained in Norway in accordance with an inter-war agreement with Alcan. The significance of the British market increased strongly as much of the expanded capacity of the 1960s targeted this. Table 4 shows the increasing importance of the British market for Norwegian exports in the 1960s. While Canada remained Britain's most important supplier, her share in total British imports fell from 52 % in 1960 to 33 % in 1968. Norway's share grew from 11 % to 40 %. When the Wilson government developed the expansion plan, Britain's share of Norway's total aluminium export was 33 %. It follows from this that the British expansion scheme might bring an end to the Norwegian export growth

**Table 4. British imports of primary aluminium. Thousand tonnes.**

	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Norway	21	35	37	52	52	46	78	67	115	106	146
Canada	149	147	166	142	156	148	176	168	135	122	121
USA	21	45	99	36	32	50	37	42	28	18	12
Total	214	254	316	240	255	271	331	324	346	307	362

Source: NA/PRO, BT 241/1744, Establishment of aluminium smelters in the United Kingdom. Report to the Council by Deputies, 23 June 1969, table 2.

### **The British expansion program in primary aluminium**

<sup>31</sup> Campbell 1989 p. 443. This was only reduced after BACO started primary production at Baie Comeau in Quebec in 1957 (Canadian British Aluminium Co.).

<sup>32</sup> Pierre Lanthier, "Alcan from 1945 to 1975: the uncertain road to maturity", *Cahiers d'histoire de l'aluminium*, Special issue 1, 2003 p. 54, table 1.

British consumption of primary aluminium had increased from 235.000 tonnes in 1958 to 365.000 tonnes in 1966. Government planners assumed a future annual increase in demand of 8 % while domestic primary smelter capacity would remain at modest 30.000 tonnes operated by Baco.<sup>33</sup> To reduce severe balance of payments problems and promote regional policy, in particular Highland development, in October 1967 the Harold Wilson government announced it was ready to negotiate with the aluminium industry the provisions of one or more large smelters, and invited large corporations to implement the program.<sup>34</sup> Having considered proposals by the corporations the government in July 1968 announced that agreement had been reached with three companies for the establishment of three smelters with a total initial capacity of 260,000 tonnes to come into production in 1971-72. This would be equivalent to about 70 % of British consumption in 1966.

Baco, controlled by Reynolds Metals and Tube Investments Ltd., would set up a smelter in Invergordon in Scotland. A consortium consisting of Rio Tinto Zinc and BICC Aluminium Holdings controlling 60 % and Kaiser controlling 40 % would establish Anglesey Aluminium Metal, located in Holyhead, Wales. Alcan would erect a smelter in Lynemouth in Northumberland. While the two former projects were based on nuclear power the latter was coal-based. The British government made special arrangements for the electricity supply. Baco and Anglesey Aluminium Metal would pay the capital costs of building new nuclear power stations but the expenses were covered by government loans. Electricity was provided through the grid, but the companies would pay a price based on the running costs of the nuclear plants. Alcan set up its own coal-powered station, and negotiated a long-term agreement for coal supplies with the National Coal Board. All companies benefited from government investment grants. Estimates made by an EFTA working party indicated that the grants would cover approximately 34 % of the total capital costs for the smelters. As for the nuclear powered smelters the investment grants were estimated to increase returns on investment from 17, 6 % to 22, 8 %. As for the coal-powered smelter the estimated increase

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<sup>33</sup> L. Cailluet, "The British aluminium industry, 1945-1980s: Chronicle of a death foretold?", in *Cahiers d'histoire de l'aluminium* Special Issue 1, 2003 pp. 73-88.

<sup>34</sup> On the broader policy of industrial development in the Highlands, cf. Niall MacKenzie "Chucking buns across the Fence? Government-Sponsored Industry development in the Scottish Highlands, 1945-1982", *Business and Economic history On-Line* 2006. On Baco's role in the Highlands, cf. Andrew Perchard, "Sculpting the 'Garden of Eden': Patronage, community & the British Aluminium Company in the Scottish Highlands, 1895-1982" in *Cahiers d'histoire de l'aluminium* 38-39, 2007 pp.11-30.

was from 14, 3 % to 16, 9 %.<sup>35</sup> While total capacity target in the first place was fixed at 260.000 tonnes by 1974, this was soon extended to 360,000 tonnes, of which each smelter would produce 120,000. Production started in 1971.

In 1969 the EFTA estimated the British expansion to make up 20 % of total planned new capacity in Western Europe and 58 % within EFTA.<sup>36</sup> On the assumption of a 5 % annual increase in demand in Britain an EFTA working party concluded in 1969 that if no British smelters were built, total British aluminium imports would probably reach more than 500,000 tonnes in 1973. However, with the establishment of the smelters, imports would reach only 140,000 tonnes. This was a substantial reduction as compared with the 361,000 tonnes imported in 1968.<sup>37</sup> Even if all British aluminium imports were to come from Norway, imports would go down.

When preparing the scheme it was eventually called the UNCLE-project. The British government was well aware it would affect Norway's export. Planners found that Norway probably would oppose the plans. However, as the Norwegian companies were controlled by Alcoa, Alcan and BACO/Reynolds these transnational corporations would easily direct Norwegian exports elsewhere.<sup>38</sup> Yet Norway might complain about the character of government support. However, also Norway applied government subsidies in terms of investment support and cheap long-term electricity contracts for heavy industry as part of regional policy.<sup>39</sup> The government carefully elaborated how it should meet international critique against the expansion scheme.<sup>40</sup> A difficult treatment in EFTA was anticipated. Anthony Crossland, President of the Board of Trade, maintained that Britain must implement the scheme whatever conclusions the EFTA Council of Ministers would reach.<sup>41</sup> This was a high-profile policy on the domestic scene which the Wilson government could not loose.

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<sup>35</sup> NA/PRO, BT 241/1744, Establishment of aluminium smelters in the United Kingdom. Report to the Council by Deputies, 23 June 1969, annex XIII, table 1.

<sup>36</sup> NA/PRO, BT 241/1744, Establishment of aluminium smelters in the United Kingdom. Report to the Council by Deputies, 23 June 1969.

<sup>37</sup> NA/PRO, BT 241/1744, EFTA, 23/05 VIII, Establishment of aluminium smelters in the United Kingdom. Report to the Council by Deputies, 23 June 1969.

<sup>38</sup> NA/PRO, BT 241/1729, Extract from the presidents interim report. Effects on Norway's exports, 2 June 1967.

<sup>39</sup> NA/PRO, BT 241/1729, Note on Norwegian electricity financing by PJ. Streams, 26 May 1967.

<sup>40</sup> NA/PRO, BT 241/1729, The UNCLE project. Report by the Chairman of the Industrial Policy Sub-Committee, 5 July 1967.

<sup>41</sup> NA/PRO, BT 241/1735, Note on Aluminium Smelter Proposal, 1 April 1968.

UNCLE had originated in the idea that the use of nuclear power would reduce the cost of electricity, if not necessarily bring it down to Norwegian or Canadian levels.<sup>42</sup> Rio Tinto Zink (RTZ), which controlled large bauxite mines in Australia, had early in 1966 approached the government to elaborate an aluminium expansion scheme in Anglesey on such a premise. The initiative soon also forced Baco to submit a proposal. Alcan, which basically had no interest in Britain developing its own smelting capacity, jumped on the bandwagon. According to Campbell, Alcan was contacted by the Highlands and Islands Development Board (HIDB) in November 1966, which suggested that Alcan might be interested in building a smelter in Scotland. An Alcan report of April 1967 argued in favour of a smelter project in Invergordon. After much back and forth Alcan decided at the end of 1967 to submit a tender to the government.<sup>43</sup> In January 1968 the government had received three tenders, displayed in table 5. Alcan's bid seems to have been weaker than Baco's, and planners tended in January 1968 to give preference to Baco and RTZ.

**Table 5. Tenders for the UNCLE-project**

Corporation	Locality	Capacity per year	Yearly balance of payments effect	Production cost per ton
BACO	Invergordon	120.000	£ 22,5 million	£ 137 million
RTZ	Holyhead	120.000	£ 17,5 million	£ 148 million
ALCAN	Invergordon	120.000	£ 16 million	£ 151 million

Source: NA/PRO, T 326/740, Summary report from Industrial Reorganization Corporation to Board of Trade, 4 January 1968.

Alcan saw its position in the UK profoundly threatened, and was strong enough to influence the government's agenda before the Cabinet took its final decision. P.J. Elton, President of Alcan (UK), intensified efforts to find acceptable solutions.<sup>44</sup> He informed the government that Alcan would go for a solution outside the IRC, the regional policy agency in charge. In March 1968 he informed that Alcan would set up a 60.000 tonnes smelter by 1970 that would

<sup>42</sup> NA/PRO, BT 241/1727, Capenhurst, international considerations, undated: "Since the countries (Norway, Canada, USA) can produce aluminium more cheaply than we can in the UK, producers must either be enabled to charge a higher price or be given a subsidy if the scheme is to go forward."

<sup>43</sup> Campbell p.

<sup>44</sup> Cf. Edmund Dell, *Political Responsibility and Industry*, London: George Allen & Unwell 1973 p. 115: "From ALCAN's point of view the project was taken on by the appearance of a conspiracy of RTZ, aided and abetted by the British Government, to deprive ALCAN of a valuable market."

be expanded to 120.000 tonnes in 1974. This smelter would not be based on cheap government electricity support based on nuclear power but on a strictly commercial contract with the National Coal Board. This Alcan scheme only assumed the 40 % investment grants generally provided under the regional policy scheme of the government.<sup>45</sup> The power station and the smelter would be set up in Lynemouth, Northumbria.<sup>46</sup> The smelter would receive alumina from Alcan's deposits in Jamaica.

Alcan's surprising project would lead to a 320.000 tonnes British capacity growth by 1974, which was far more than the 240.000 tonnes the planners had foreseen. Yet the cabinet accepted Alcan's plan in March 1968. Shortly thereafter it successfully moved BACO and RTZ to reduce their smelters' capacity from 120.000 to 100.000 each. Alcan for its part accepted to delay the second stage of the Lynemouth scheme. In July the three projects, adding to 260.000 tonnes, were announced in the House of Commons.<sup>47</sup>

### **The diplomacy of aluminium expansion programs**

The Norwegian government was formally informed about the British policy to set up the three aluminium smelters in October 1967. It soon adopted a policy to stop or delay the British program by means of diplomacy. This failed completely as the British government announced an expanded programme in July 1968. The only tool at Norway's hand was offered by the EFTA machinery. The EFTA presented expert reports in 1968 and 1969 which indicated that the British plans would harm Norwegian exports.<sup>48</sup> Oslo argued that the British government's investment grants represented a violation of Article 13,1B of the Stockholm Convention, which, however vaguely formulated, restricted the use of government aids. It also threatened to bring the conflict under article 31, which laid out complaints procedures and eventually allowed for "tariff retaliation". But it never did. EFTA had weak powers and a formal complaint would probably have paralysed the EFTA as most other member-states tended to support Norway's perspective. Therefore the Norwegian government suggested compromises, i.e. a reduced British capacity build-up. This however the British government consequently

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<sup>45</sup> NA/PRO, BT 346/1, Alcan's basic arguments, 8 February 1968; NA/PRO, BT 241/1734, The Aluminium Smelter Project. Brief for President of the Board of Trade, 1 March 1968.

<sup>46</sup> For some new period in the spring of 1968 Alcan reconsidered Invergordon as location but again landed on Lynemouth.

<sup>47</sup> Campbell 1985 p. 456 ff.

<sup>48</sup> EFTA archive (henceforth EFTA), Geneva, 23/05 II, Ad hoc working party on the UK's aluminium smelters – chairman's summary, 8 March 1968; EFTA, 23/05 VIII, Establishment of aluminium smelters in the United Kingdom. Report to the Council by Deputies, 23 July 1969.



turned down. The British government was under pressure from the involved corporations, all of which wanted generous expansion targets and quick decisions. Eventually the conflict found its way into the EFTA Council, which on 27 November 1969 adopted a *modus vivendi* void of any substance. The Council “would follow developments in EFTA trade in aluminium and in particular the development of Norway's exports to the UK and to other major markets and would consider to what extent Norwegian interests were being affected by the new British smelters.”<sup>49</sup>

While the Norwegians tended to overestimate the negative impact of the British smelters on bilateral aluminium trade the British tended to play it down. Whitehall continuously denied that the plans would “frustrate” Norwegian exports as the industry majors involved in Norway would have the power reallocate Norwegian aluminium supply into other markets worldwide. This was a valid argument as Alcan, Alcoa and Baco ( and Alusuisse) had least 50 % stakes in reduction plants representing 81.5 % of total Norwegian production in 1967. They also had interests in the British aluminium semi-manufacturing industry, which they collectively controlled by 75 %. All foreign corporations involved in the Norwegian expansion program except for Alusuisse were also involved in the British expansion program.

The Anglo-Norwegian aluminium conflict frustrated the bilateral relations until the UK joined the EC. But did the British expansion program reduce Norwegian exports? 1968 and 1969 were golden years for producers of primary aluminium. Norway produced 468,000 tonnes and 502,000 tonnes, respectively. British demand was high, and Norwegian companies made good profits on the British market. However, in 1970 and 1971 aluminium prices slumped to their lowest level for 25 years as a substantial over-capacity occurred.<sup>50</sup> This made the three British smelter companies delay their investment schemes. Thus as late as 1977 British primary production still totalled less than 350 000 tonnes. Norwegian production grew from 522,000 tonnes in 1970 to 617,000 tonnes in 1976. The latter year Norway still supplied 51 % of British aluminium imports while in 1968 only 40 %. In retrospect the Norwegian concern appears ungrounded.

The following sequence is a chronological account of the diplomatic conflict.

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<sup>49</sup> EFTA, CJC.SR, 35/69, EFTA Ministerial Council, 27 November 69.

<sup>50</sup> OECD, *Problems and Prospects of the Primary Aluminium Industry*, Paris 1973, p. 49-51.



Prime Minister Wilson announced what was later called the UNCLE project on 23 October 1967 in the EFTA Council of Minister. The Norwegian government soon asked for a meeting, held in London on 11 December, in which UK officials informed about the aluminium plans.<sup>51</sup> The government in Oslo was deeply concerned. It assumed British expansion would negatively affect the Norwegian companies' investment decisions.<sup>52</sup> Minister of Trade Kåre Willoch asked for a meeting with Anthony Crossland, held on 24 January 1968. Willoch warned against government investment grants while Crossland maintained that Norway also applied regional policy subsidies. Willoch still threatened to bring the issue into the EFTA.<sup>53</sup> Willoch tabled the issue as the EFTA Council of Minister met on 3 February, arguing that the plan did not conform with paragraph 31 of the Stockholm convention. The Council appointed an ad-hoc working group to review the British plans and Norway's allegations. Norway submitted a "rough" memorandum which argued that by establishing the two announced smelters according to schedule, Norway might lose 240.000 tonnes of export by 1975. This distortion of trade would be caused by the British subsidies, which was estimated to cover one third of the price of the British companies' production of ingots<sup>54</sup> Britain argued that the country profoundly needed smelting capacity, that government support schemes were part of general regional policy schemes and that they did not violate the EFTA treaty.<sup>55</sup> The EFTA working party submitted a report on 12 March. This was rather ambiguous and concluded that Anglo-Norwegian trade might be distorted but it might also not. The two member-states ought to find a solution to the conflict through bilateral talks.<sup>56</sup> This was supported by the Council on 20 March and already on 26 March Mr. Willoch and Mr. Crossland resumed in London for talks. At that point in time the British government had not yet informed about the changes in the scheme as a result of Alcan's intervention since January. Crossland therefore presented the reduced 20.000 tonnes each for BACO and RTZ as a concession to Norwegian concerns. He however informed Willoch that Alcan would also erect a 60.000 tonnes smelter, while not

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<sup>51</sup> NA/PRO, BT 241/1730, Aluminium smelters and the Norwegians, 20 November 1967; NA/PRO, BT, 241/1731, Bilateral Discussions with a Norwegian delegation on United Kingdom proposals for developing an aluminium smelting industry in the U.K., 11 December 1967.

<sup>52</sup> Utenriksdepartementets arkiv (Ministry of Foreign Affairs Archives, henceforth UD), Oslo, 52.1/56, Note on the British aluminium plans and their consequences for Norwegian aluminium industry, 20 November 1967.

<sup>53</sup> NA/PRO, BT 241/1732, Aluminium smelting: Discussions with Mr Willoch CRE 17587/7, 26 January 1968;

<sup>54</sup> NA/PRO, BT 241/1733, Ad Hoc Working Group on UK Aluminium Smelters, Geneva 13<sup>th</sup> and 14<sup>th</sup> February, 1968. Memorandum by the Norwegian Delegation, 13 February 1968.

<sup>55</sup> NA/PRO, BT 241/1733, UK Aluminium Smelting Proposals defensive Brief for use in EFTA, undated; BT 241/1735 AD Hoc Working Party on United Kingdom Aluminium Smelters. Report to Council, annex XI Statement by the United Kingdom delegation, 12 March 1968.

<sup>56</sup> EFTA, 23/05 II, Ad hoc working party on the UK's aluminium smelters – chairman's summary, 8 March 1968; NA/PRO, BT 241/1735 AD Hoc Working Party on United Kingdom Aluminium Smelters. Report to Council, annex XI Statement by the United Kingdom delegation, 12 March 1968.

informing about the extra 60.000 tonnes Alcan had scheduled for 1974. According to a British account, Willoch was stubborn at the start of the meeting but now turned cross.<sup>57</sup> The conflict had certainly escalated during the meeting.

When the Council met again on 28 March, Eugene Melville, the UK deputy representative, clearly maintained that EFTA was not a cartel that divided markets among the member-states but a free-trade association that conformed to GATT regulations. He concluded: “The Council would have to ask themselves on what grounds under the Convention the United kingdom was not entitled to go ahead with plans to develop its aluminium industry and generally to carry through its current expansion of the economy.”<sup>58</sup> Although the Norwegian representative, Mr. Søren Chr. Sommerfeldt, maintained that the smelters would receive subsidies in violation of the EFTA treaty, the firm British position made an impression in Oslo. Mr. Willoch authorized mr. Sommerfeldt to suggest a compromise. On 3 April Norway suggested that the UK should limit her national primary aluminium production to 180.000 tonnes per year until 1974 before EFTA that year would evaluate the impact of the new smelters on Norway’s aluminium industry.<sup>59</sup> The suggestion received general support among other member-states except for the UK. While influential government planners tended to support Norway’s compromise suggestion, the corporations immediately turned it down. Firstly, RTZ wanted momentum in the process and disliked “the mess” in EFTA. Secondly, and more important, P.J. Elton, president of Alcan (UK), bluntly turned it down: “*We can not accept now or in the future that EFTA views should in any way determine our rate of production or the timing of our reaching the 120.000 tonnes of output.*”<sup>60</sup> Elton furthermore believed that Norway’s policy more reflected Mr. Willoch’s ideas than the ideas of the Norwegian cabinet.<sup>61</sup> When the EFTA Council met on 9 May to discuss the Norwegian proposal the UK declined any restrictions but accepted that the EFTA would undertake an evaluation of the impact on Norway’s export in 1971. This concession seems to have been

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<sup>57</sup> NA/PRO, BT 241/1735 Telegram (telno 561) from Foreign Office to EFTA-delegation, 27 March 1968: “*From the outset it was clear that no useful outcome could be expected .Willoch considers that the EFTA have largely supported the Norwegian case and that the council’s request for further bilateral discussions was essentially a request to the UK to reduce the amount of the proposed smelter capacity.*”

<sup>58</sup> NA/PRO, BT 241/1735, Aluminium Smelters in the United Kingdom EFTA/CJC.SR 12/68 (Melville’s speech), 28 March 1968.

<sup>59</sup> NA/PRO, BT 241/1735, Telegram (telno 129) from E. Melville to Foreign Office, 3 April 1968.

<sup>60</sup> NA/PRO, BT 241/1736, Letter from Elton to Brown, 9 April 1968.

<sup>61</sup> NA/PRO, BT 241/1736, Aluminium Smelters: Effect of ALCAN proposal on Norway, 5 April 1968: “

developed in dialogue with Mr. Elton.<sup>62</sup> On the request of the other EFTA member-states Mr Crossland met Mr. Willoch one more time before the British cabinet would take its decision on the UNCLE project. This took place in Oslo on 20 May 1968. Willoch pleaded for a compromise that would sustain Norway's export of 100.000 tonnes to the UK. While Baco and Alcan had confirmed to the Norwegian government that they would continue to buy Norwegian aluminium although not a fixed quantity, RTZ had given no such insurance. With Crossland not giving concessions except for the EFTA review at a certain point in time, Willoch, who wanted a fixed ceiling for capacity, suggested another compromise, in which the EFTA would assess implication when the capacity was 260.000 tonnes.<sup>63</sup> Having proposed 180.000 tonnes in EFTA on 3 April the Norwegian government now was in motion. There was no mention of applying the formal complaints procedure of EFTA. Crossland however only accepted an EFTA evaluation. His cabinet had already in March made a principal decision to erect the three smelters. After the three smelter projects were announced in Parliament 10 and 24 July, Crossland wrote a letter to Willoch, emphasizing that the UK government had no further expansion plans and no intention whatsoever of restricting Norwegian aluminium export.<sup>64</sup>

Whitehall now hoped Oslo would stop messing about the smelters but on 8 August Willoch informed Crossland that his government once again would approach EFTA and possibly invoke Article 31 of the treaty.<sup>65</sup> Thus was done on 12 September. With the support of Sweden, Switzerland and Denmark another assessment committee was appointed. This was commissioned to submit a report in May 1969 but this was delayed until 23 June 1969. The delay was caused by Norway as the government in Oslo from now on adopted a more offensive policy to convince the EFTA member-states. The government focused more on challenging the British investment grants and the power contracts but Norwegian aluminium producers were asked to estimate the effect of their sales to the UK. The smelters in Mosjøen and Lista were the most dependent on British consumption and Elkem estimated their shipments in 1973 would be 142,000 tonnes without the British smelters while only 47,600

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<sup>62</sup> NA/PRO, BT 241/1737, EFTA Ministerial Meeting 9-10 May. Aluminium Smelters, 9 May 1968. UD, 52.1/56 IV, Note on discussions in Oslo between Minister Anthony Crossland and Minister Kaare Willoch on 22 May 1968, undated.

<sup>63</sup> NA/PRO, BT 241/1737, Aluminium Smelters. Talks in Oslo with Mr. Willoch, 24 May 1968.

<sup>64</sup> NA/PRO, BT 241/1740, Letter from Crossland to Willoch, 24 July 1968.

<sup>65</sup> NA/PRO, BT 241/1740, Letter from Willoch to Crossland, 8 August 1968.

with.<sup>66</sup> On the basis of the information from the companies the government in 1969 estimated a total Norwegian yearly loss of about 140,000 tonnes in 1973.<sup>67</sup>

As the EFTA presented its second ad-hoc report in July 1969, it concluded that the British capacity expansion would harm Norwegian exports.<sup>68</sup> However, the argument that investment government grants and power contracts were violating the EFTA treaty was weak. Norway applied equivalent measures. The government therefore never invoked Article 31 and the EFTA Council, as mentioned, adopted a *modus vivendi* void of any substance which on 27 November 1969.<sup>69</sup>

The Norwegian government's position was certainly weak in relation to the UK. However, the British government's position towards Alcan in particular, was also weak. Because the Alcan smelter in Lynemouth would be based on coal, it was less dependent on government policy. On 13 January 1969 P.J. Elton informed the Board of Trade that Alcan would not wait until the 1971 EFTA evaluation that UK had promised the Norwegians, but start building the full capacity of the Lynemouth smelter.<sup>70</sup> This came as a surprise to the government, who had hoped for a delay to avoid embarrassing the Norwegians even further. In addition, the Aeroplane and Motor Aluminium Casting Ltd. (AMAC) also informed it planned to erect a 30,000 tonnes smelter in the Midlands, also to be run by coal from the NCB.<sup>71</sup> The planners feared that Alcan's and AMAC's schemes also might lead Baco and RTZ to subvert their promises to only build 100,000 tonnes capacity instead of 120,000 tonnes as originally envisaged. In that case the British expansion program would target 390,000 tonnes, and cause an even deeper row with the Norwegians. Politically, this might strengthen the Norwegian case in EFTA.

Yet the British government did not change policy. It was informed that investments in Norwegian aluminium industry commenced: "...*recent optimistic pronouncements by chiefs*

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<sup>66</sup> RA, ID, UA, box 78, Letter from Elkem to Ministry of Trade, 23 April 1969.

<sup>67</sup> RA, ID, UA, box 78, Note by Nils Dahl to Skarstein on the aluminium conflict, 3 June 1969.

<sup>68</sup> EFTA, 23/05 VIII, Establishment of aluminium smelters in the United Kingdom, report to the Council by Deputies, 23 July 1969.

<sup>69</sup> EFTA, CJC.SR, 35/69, EFTA Ministerial Council, 27 November 69.

<sup>70</sup> NA/PRO, BT 241/1742 The Second Stage of the ALCAN Smelter, 14 January 1969.

<sup>71</sup> NA/PRO, BT 241/1742, Proposal by AMAC Ltd to build an aluminium reduction plant, 3 January 1969.

*of the Norwegian industry and announcements of major expansions of capacity in Norway have largely undermined the Norwegian position.”*<sup>72</sup> Whitehall knew it had a strong case.

### **Conclusive remarks**

The intensity with which the two governments fought for their expansion programs is revealing. The competition within the European political economy of aluminium was fierce and governments were willing to use politics to support their businesses. Although Norway had a weak case in terms of EFTA law the account also shows British political power.

The role of Alcan, maintaining close liaison with both governments, has not yet been fully investigated. The account provides the context in which an investigation can be carried out.

As mentioned, in retrospect the Norwegian concern appears totally ungrounded. The fact that the British smelters turned out to be not very competitive adds further irony to the story.

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<sup>72</sup> NA/PRO, BT 241/1743, Aluminium Smelters and EFTA, 28 March 1969.