CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Transfer of the South African population of *Poicephalus robustus* from Appendix II to Appendix I in accordance with Annex 1 section A (ii), B (i) and C (ii).

B. Proponent

Republic of South Africa.

C. Supporting statement

1. Taxonomy

1.1 Class: Vertebrata

1.2 Order: Aves

1.3 Family: Psittacidae

1.4 Genus, species and subspecies: *Poicephalus robustus robustus*

Author and year. (Gmelin) 1788.

The Cape Parrot has recently been recognised as a separate species (Clancey 1997; Wirminghaus et al. 2000, Solms et al. In press.). Clancey's (1997) proposals are accepted with *P. robustus* as a separate species from *P. fuscicollis*. This separation is based on morphological, biogeographical and ecological differences (Wirminghaus1997, Wirminghaus et al. 2000), which have been corroborated with DNA sequencing data (Solms et al. In press). The arrangement of *P. fuscicollis* is revised; with two subspecies, the Brown-necked Parrot *P. f. suahelicus* and the Grey-headed Parrot *P.f. fuscicollis*. Numerous criteria are satisfied to reclassify the Cape Parrot *P. robustus* within the CITES Appendix 1 priorities.

1.5 Scientific synonyms: None known.

1.6 Common names: English: Cape Parrot, Levaillant's Parrot, Brown-necked Parrot, Knysna Parrot
French:
Spanish:

1.7 Code numbers: Not known.

2. Biological parameters

2.1 Distribution

The Cape Parrot has a localised distribution in the Eastern Cape, KwaZulu-Natal and Limpopo Province of South Africa (Wirminghaus 1997), whereas its congeners are more widely distributed. *P.r. suahelicus* ranges from Mpumalanga (Symes 2002) of South Africa to Mozambique and Zimbabwe, and north to Tanzania and southern Democratic Republic of Congo. *P.f. fuscicollis*

occupies West Africa from southern Senegal through Gambia, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Ivory Coast, Ghana and enters Togo (Forshaw 1989).

2.2 Habitat availability

The Cape Parrot is a habitat specialist, dependent on Afromontane yellowwood (*Podocarpus*) forest at 1000 – 1700 m as for its feeding and breeding (nesting), which separates it geographically from the Grey-headed Parrot *P.f. suahelicus* which occurs in lowland forest (Juniper & Parr 1998).

Early settlers in South Africa soon realised the attractiveness and quality of yellowwood timber for furniture making, and the forests were utilised for this purpose, initially at low intensity. However, with increase in colonisation and the human population, demand increased steadily, and commercialisation began. This later resulted in over-exploitation in some areas, forest fragmentation, and eventually forest loss. Today, naturally forested areas in South Africa comprise < 2 % of all landscapes, and of these only a small fraction is Afromontane yellowwood forest. Legal and illegal extraction of yellowwoods continues today at an alarming rate. Therefore, the availability, suitability and connectivity of the prime, and indeed only, habitat of the Cape Parrot has declined drastically (Wirminghaus 1997, Wirminghaus et al. 2001). This is likely a major cause of the rarity of the species Wirminghaus et al. 1999). Less forest means fewer parrots because the food resource base is less and there are fewer nesting sites. Also, it means that the parrots have greater foraging distances, and that when natural food supplies crash, they some times forage in fruit or nut orchards where they can, and have been, shot by farmers (e.g. about 20 parrots in an orchard in the Eastern Cape a few seasons ago).

2.3 Population status

ENDANGERED (SA Red Data Book). *P.r.robustus* has very low population numbers and an increasingly local geographical range although it is fairly wide-ranging within its distribution. It is in urgent need of ongoing conservation attention in the Afromontane forests of South Africa (Wirminghaus et al. 1999, Wirminghaus et al. In press).

Breeding success is low and populations are considered to be declining (Wirminghaus et al. 1999, 2001b). The Cape Parrot breeds in Afromontane forest above 1000 m above sea level, and scarcity of nest sites is likely a major factor limiting breeding success that has contributed to this decline (Skead, 1964, 1971, Symes & Downs 1998, Wirminghaus et al. 1999).

Brooke (1994) highlighted the importance of retaining the presence of large forest yellowwoods that may provide important breeding sites for the Cape Parrot. Large yellowwoods removed in the past for timber, would now be dying and providing natural nest cavities, but are no longer available (Symes & Downs 1998). These practices still occur and at least two sawmills in the Keiskammahoek-Stutterheim region of the Eastern Cape have long term contracts to remove and process *Podocarpus* spp. from the forests in the region. The importance of these large trees in providing nesting cavities for numerous forest species has been highlighted. Studies of nesting requirements also suggest that the nest-sites are limiting as few nests have been found, consequently, there is little recruitment (Wirminghaus et al. 2001 b).

Observations made at nests suggest that approximately half of the eggs or chicks in average clutches of four survive to leave the nest. During 2002, two nests were closely monitored. Three chicks in the one cavity were killed when the tree was blown down in a storm. (Cape Parrots nest in snags in dead and decaying yellowwood trees, seldom in live healthy ones). Four eggs were laid in the second nest, three hatched, but were attacked by a predator or hole nesters, and one of these chicks was removed for hand-rearing. It has survived and will be used in the captive breeding programme. (From another known nest, at least one chick fledged). Rates of post-fledging survival are not quantified, but are characteristically higher in juveniles and sub-adults than adults.

In captivity, the birds will double clutch, if eggs are removed for incubation and hand-rearing. (This could aid preservation of the species in captivity but not in the wild, as release and re-introduction is NOT advised. This is because of the possible introduction of disease into the wild population, the difficulty of socialising and integrating captive birds in to the complex social structure of the wild population, and because captive birds are susceptible to predation and malnourishment).

Although it is difficult to sex Cape Parrots in the wild, numerous observations made in the natural habitat over almost ten years, do not suggest a markedly skewed sex ratio. In captivity, there is a preponderance of males, approaching 2 males: 1 female, although multiple clutching and associated nutritional/physiological stress might be a contributory factor.

With reference to population age structure, large parrots typically live for many years as they are K-selected, occupying stable climax, often forested, communities. This is true for the Cape Parrot and its natural population age structure would almost certainly parallel that of the African Grey Parrot or the neotropical *Amazona* species (Snyder et al. 1987). Therefore a table population would comprise individuals of all ages, unless young birds are poached and / or suffer greater mortality from Psittacine Beak and Feather Disease (PBFD) (see 2.7). Cape Parrots only start breeding when 4 – 5 years old, and only breed once a year, but may not breed each year. (This species is rare in captivity, and although it is not difficult to breed, few birds have been bred. Cape Parrots can be successfully maintained and bred in 4m long walk-in or suspended aviaries. A diet similar to that used for African Grey Parrots supplemented with nuts is satisfactory (Forshaw 1989).

2.4 Population trends

The status of the Cape Parrot is critical. The maximum number of birds recorded during annual censuses throughout the entire range of the species by hundreds of volunteer observers was as follows 1998: 348; 1999: 282; 2000: 396 and 2001: 358. The population is small and very vulnerable. Flock size is rarely greater than ten birds, although larger flocks concentrate at roost sites, water points and fruiting trees, and represent an aggregation of several groups (Wirminghaus et al. 2001 a, b). At certain times of the year, when natural forest fruit abundance is low, flocking of birds occurs in orchards, and the birds are vulnerable to capture and persecution. Parrots have been shot raiding pecan nut orchards, and shot with catapults for food.

2.5 Geographic trends

The wild population has a restricted distribution and is characterised by fragmentation and a decrease in habitat (Wirminghaus1997, Wirminghaus et al. In press).

The Cape Parrot is endemic to South Africa (Wirminghaus et al. 1999). It now only occurs within a discontinuous distribution from Fort Beaufort in the Eastern Cape through to the Karkloof in KwaZulu-Natal (Wirminghaus1997, Wirminghaus et al.1999, In press), with a small relict population in the escarpment forests near Woodbush, Limpopo province (Wirminghaus1997, Barnes1998, Wirminghauas et al.1999).

The Cape Parrot is primarily associated with Afromontane yellowwood forest, but is not confined to it, occasionally flying to other habitats in search of food (Skead 1964, Rowan 1983, Wirminghaus et al. 1999, 2001c). Afromontane forests are dominated by *Podocarpus* spp. and occur at 1 000- 1 500 m altitude, on south-facing slopes that receive frequent mist in summer and a mean annual rainfall of > 1 000mm per annum. Yellowwood trees, particularly *P. falcatus* (a forest canopy emergent species), are particularly important for breeding, feeding and social interactions of Cape Parrots (Wirminghaus et al. 1999,2001c).

2.6 Role of the species in its ecosystem

The Cape Parrot is a dietary specialist feeding primarily on the endocarps of *Podocarpus* spp. in the wild (Skead 1964, Wirminghaus 1997, Wirminghaus et al. 2002). It also feeds on the endocarps of a variety of forest fruit, yet the number of other food species used is low (Wirminghaus et al. 2001c). Seasonal changes in food species eaten reflect changing availability of the various fruiting plant species (Wirminghaus et al. 2001c). They are food nomadics moving locally between forest patches in search of food, and occasionally make long foraging forays to coastal forests or commercial orchards (Skead 1964, Wirminghaus 1997, Wirminghaus et al. 2002a). Habitat destruction and increased distance between forest patches results in an increase in foraging distance, which may have consequences for the conservation of the species.

Depletion in numbers of the Cape Parrot might result in an increase in the number of Rameron Pigeons (*Columba arquatrix*) and Trumpeter Hornbills (*Ceratogymna bucinator*), which occupy the same habitat and utilise the same food resources. Loss of the Cape Parrot would make their nesting cavities available to other cavity nesting species. It is extremely unlikely that forest structure or regeneration would be affected or altered (Wirminghaus et al.2001c).

2.7 Threats

A major threat is habitat fragmentation and loss (see 2.2 above), which is confounded by the low rate of population increase (2.3), population trend (2.4) and reduced geographical distribution (2.5). Some parrots are shot by pecan nut farmers, a few are taken for the muti-trade (traditional ethno-medicinal properties), and some are kept as pets by farmers. The other major threat, along with habitat loss, is illegal trade for aviculture, which is based primarily in South Africa. Market prices have escalated dramatically over the past decade (3.3). Prosecutions in court have failed because of technicalities and corruption.

Neither introduced species nor predators represent a significant threat to the viability of Cape Parrot populations. This is also true of hybridisation in the wild, although it occurs in captivity.

The southern (Eastern Cape) population of the Cape Parrot appears to be infected with PBFD. Ten birds confiscated at the roadside were infected with the virus, for which there is no effective treatment. A few wild birds in the Eastern Cape and KZN have also shown clinical symptoms. The disease is fatal for nestling birds although adults may survive if well nourished. Therefore the Eastern Cape population, which comprises more than half of the global population, may comprise infected individuals; therefore, in reality they are non-reproductive. Because of this, the effective population is likely to be considerably less than the population estimate of approximately 500 birds.

3. Utilization and trade

3.1 National utilization

Precise data are not available, however, market prices have increased from about R 1000 per pair ten years ago to around R 35 000 /pair today (Avizandum) although no birds are currently or overtly available for sale. The birds are sought by aviculturists to make a quick profit, by "collectors" of rare species, or by 'preservationists". Birds are either poached from nests; caught in snares or with catapults at water holes; or captured using birdlime and a caller bird. The level of off-take is very difficult to quantify but likely represents 20-50 birds per annum, i.e. up to 10% of the entire population per annum. The national trade is currently far more intensive than international trade.

There are approximately 50 birds in captivity in breeding programmes. Several of the established mated pairs breed regularly although others seldom or never do. Unfortunately, PBFD has caused very high mortality and approximately half of the chicks hatched in the last five years died or have been put down before fledging. No captive bred birds have been reintroduced in to the wild and this

is not recommended or proposed because of PBFD and other factors (see 2.3). They will hopefully supply the demand otherwise currently met by Cape Parrots poached from the wild.

3.2 Legal international trade

The UNEP-WCMC significant Trade in Animals, Net Trade Outputs report of November 2000 indicates that 6415 *"P. robustus"* were traded internationally from 1994 – 1998, an average of 1283 per annum. Unfortunately, the figures represent *Poicephalus robustus robustus* and *Poicephalus robustus fuscicollis* combined. The following numbers of parrots were traded annually, i.e. 1994: 3871; 1995: 1403; 1996: 750; 1997: 113 and 1998: 278, which is a marked and significant decline. It is not known whether this was caused by reduced demand or over-exploitation but the latter is expected.

A major difficulty in providing evidence of international trade is that the Grey-headed Parrot (*P.r. suahelicus*) and Brown-necked Parrot (*P.r. fuscicollis*) are also traded by the common name Cape Parrot. (For a summary of the taxonomic position of these related species see Wirminghaus et al. 2000, Solms et al. In press).

As far as is known, there are no *P.r. robustus* in North America (Patisson pers.comm.), in the UK (Moat- Stud Book Keeper for the Cape Parrot species complex of the *Poicephalus* section of the (British) Parrot Society), or Holland and adjacent countries (van Kooten-Stud Book Keeper in Holland, and soon also for Germany). The only known *P. robustus* in Europe, and indeed outside southern Africa, are at the Parc Zoologique et Botanique de la Vie.

The main breeder of *P.r. robustus* in South Africa (and therefore globally) is William Horsfield who collaborates closely with the Research Centre for African Parrot Conservation at the University of Natal. According to Mr Horsfield there is demand for *P.r.robustus* from aviculturists outside South Africa (e.g. from Greece, Belgium, Holland). There was speculation that there might be some *P. robustus* in Holland. However, the supposed source, Loro Parque in the Canary Islands, has none in its collection (De Soye, Scientific Director, pers.comm.). Birds belonging to the super-species complex are traded in South Africa, but most are *P.r.suahelicus*, a few are *P.r. fuscicollis*, and very few are *P.r. robustus*. (Permit offices of KZN Wildlife, Eastern Cape and Gauteng Nature Conservation).

3.3 Illegal trade

See 3.1 and 3.2 above. Currently, national trade is much greater than international trade, but demand from overseas has increased. There is no legal off-take because of nature conservation legislation and therefore all trade in wild birds is illegal. Trade is the most significant cause of population decline because it is intensive, numerically and over a short time frame (a few years) whereas the effects of habitat fragmentation and loss are mid- to long-term factors.

According to the latest taxonomic classification, the Cape Parrot is a separate species, which is endemic to South Africa. This might increase collectors value and therefore a CITES Appendix I status can prevent over-exploitation of wild populations for commercial purposes.

3.4 Actual or potential trade impacts

See 3.3 above. Commercial trade will be severely detrimental to the viability of wild populations of the Cape Parrot in the short to mid term. In the long term, trade in F2 captive raised birds could prevent poaching from the wild (i.e. well nourished, disease-free, tame, captive birds). There are no perceived ecological impacts.

3.5 Captive breeding overseas

According to existing records, there is only one pair of Cape Parrots in a collection in France (see 3.2 above). They have not bred in recent years and their contribution to captive breeding for the species is minimal numerically, although might be important genetically.

4. Conservation and Management

4.1 Legal status

4.1.1 National

The Cape Parrot is recognised as a Red Data Book Endangered Species in South Africa (Barnes 2000). It is protected by general wildlife legislation in the provinces of South Africa where it occurs naturally. Afromontane yellowwood forest is similarly protected (although in theory rather than practice). The Cape Parrot is totally protected in terms of legislation.

The only legal trade in Cape Parrots relates to wild caught birds collected before current legislation was implemented. No permits have been issued for several years and currently there is no known overseas trade in the species.

4.1.2 International

See 3.2 above.

4.2 Species management

4.2.1 Population monitoring

See 2.4 above.

Censuses are conducted in association with the Cape Parrot Working Group (CPWG), the World Parrot Trust (Africa) and the Research Centre for African Parrot Conservation at the University of Natal. This monitoring links with provincial government agencies, Department of Water Affairs and Forestry (DWAF), and the Department of Environmental Affairs and Tourism (DEAT) through the CPWG.

4.2.2 Habitat conservation

Afromontane yellowwood forest is protected provincially by general nature conservation legislation. Harvesting of trees for timber is controlled by DWAF and provincial nature conservation organisations.

4.2.3 Management measures

There are none, other than the role played by the CPWG in establishing the Stud Book. There is no management or sustainable harvesting. There are also no mechanisms to ensure a return from the utilization of the species to conservation or management programmes.

4.3 Control measures

4.3.1 International trade

Those required by the current CITES Appendix 2 status of the Cape Parrot.

4.3.2 Domestic measures

There is no sustainable harvesting.

5. Information on Similar Species

Look-alike Species: The Cape Parrot is morphologically very similar to the Grey-headed Parrot, but is distinguished from it by head colouration. The Cape Parrot has a golden, olive head and neck whereas that of the Grey-headed Parrot is silver or grey, sometimes with a suffusion of pale pink. Cape Parrots and Grey-headed Parrots show similar morphological and colour differences between the sexes and between adults and juveniles). An informed layperson should be able to distinguish between the species. Measurements to aid separation and distinguishing between the species are given in Wirminghaus et al. (2000).

6. Other Comments

None.

7. Additional Remarks

Community participation: The local population has been closely involved with increasing awareness of the plight of and need for conservation of the Cape Parrot. Many meetings have been held with local communities, particularly women's groups, who have made wall hangings to raise funds; through schools, with foresters, and with the local army commando, who alerted us to illegal trade in dead birds for muti-medicine.

The Cape Parrot Working Group was established in 2000 and four major workshops have been held. Participating members include provincial nature conservation authorities (key role players are those from KZN and Eastern Cape), forestry officials (DWAF), NGO's, veterinarians, academics, aviculturists, farmers and eco-tourism operators.

Workshops have been held for DWAF and South African Forest Company (SAFCOL) and delegates included Indigenous Forest Management Staff, Forest Managers, Timber Merchants and Forest Security Staff. More are planned with KZN Wildlife and Eastern Cape Nature Conservation.

Since 1997, a Cape Parrot Big Birding Day has surveyed the entire range of the Cape Parrot to obtain an accurate estimate of numbers. The range is divide in to areas, each managed by a local co-ordinator who oversees a team of volunteer observers.

Education: A hundred posters, concerning the need for conservation of the Cape Parrot, funded by Birdlife International SA, have been distributed to key individuals concerned with the conservation initiative of the Cape Parrot, to national and provincial conservation organisations, to schools, bird clubs, quarantine stations, libraries, and universities. A further hundred are being printed in Xhosa and Zulu (local languages) copies are being planned. Plans are under way to incorporate Cape Parrot conservation issues in to the National Schooling Curriculum as a case study in Environmental Science. Popular talks have been given to many such groups. Popular articles have appeared in many newspapers, bird magazines, and there has also been TV coverage. Scientific papers have been published during 2001-2002, and presented at conferences across South Africa, and in the USA, South America, Australia, Africa, and Europe (and in Asia in August 2002). Recently, two films have been shown on SA National television relating to the Cape Parrot and its yellowwood forest habitat; two more are planned.

Taxonomy: The current status of the Cape Parrot has been clearly resolved as demonstrated in the following publications:

Clancey, P.A. 1997. The Cape Parrot : an additional valid species. *Honeyguide.* 43: 61-62.

Wirminghaus,J.O., Downs, C.T., Symes,C.T. & Perrin, M.R. 2002. Taxonomic relationships of the subspecies of the Cape Parrot *Poicephalus robustus*. *J.Nat.Hist.*

Solms, L., Perrin, M.R., Downs, C.T., Symes, C.T. & Bloomer, P. Confirmation of the taxonomic relationships of the Cape Parrot *Poicephalus robustus* and the Brown-necked Parrot *P. fuscicollis,* using DNA sequencing.

8. References

Barnes, K.N. 1998. Important bird areas of the Eastern Cape. In, Barnes, K.N.(ed.). The Important Bird areas of Southern Africa. Pp 197-218. Birdlife, South Africa, Johannesburg.

Barnes, .N. 2000. The Eskom Red Data Book of Birds of South Africa, Lesotho and Swaziland. Birdlife, South Africa, Johannesburg.

Brooke, R.K. 1984. South African Red Data Book- Birds. Council for Scientific and Industrial Research, Pretoria, RSA.

Boschoff, A. 1980. The status and conservation of the nominate race of the Cape Parrot (*Poicephalus robustus robustus*) (Gmelin) in southern Africa.Unpublished report.

Clancey, P.A. 1997. The Cape Parrot. An additional valid species. *Honeyguide.* 43: 61-62.

Downs, C.T., & Symes, C.T. 1998. Cape Parrots: report on the second Cape Parrot Big Birding Day, (25 April 1998). *PsittaScene* 10(3);5-7.

Downs, C.T. 2000. The cape crusader. *Parrots* (UK). 36;47-49.

Forshaw, J.M. 1989. Parrots of the World. Third edition. Lansdowne editions, Melbourne.

Juniper,T., & Parr, M.1998. Parrots-A Guide to the Parrots of the World. Pica press, Sussex.

Rowan, M.K. The Doves, Parrots, Loeries and Cuckoos of Southern Africa. David Phillip, Cape Town.

Skead, C.J. 1964. The overland flights and the feeding habits of the Cape Parrot, *Poicephalus robustus* (Gmelin) in the eastern Cape Province. *Ostrich.* 35 202-223.

Skead, C.J. 1971. The Cape Parrot in the Transkei and Natal. *Ostrich Supplement*. 9:165-178.

Snyder, N.F.R.,Wiley, J.W. & Kepler, C. 1987. The Parrots of Luquillo: Natural History and Conservation of the Puerto Rican Parrot. Western Foundation of Vertebrate Zoology, Los Angeles.

Solms,L., Perrin, M.R., Symes,C.T.,& Bloomer, P. In press. Confirmation of the taxonomic position of the Cape Parrot *Poicephalus robustus* and the Brown-necked Parrot *P.fuscicollis*, based on DNA sequencing.

Symes, C.T. 2002. The biology of the Grey-headed Parrot *Poicephalus fuscicollis suahelicus.* M.Sc. Thesis, University of Natal, South Africa.

Symes, C.T. & Downs, C.T. 1998. The role of nest sites in population declines of the Cape Parrot. *Avizandum.* Sept 1998 pp 32-33.

UNEP - WCMC 2000. Significant Trade in Animals: Net Trade Outputs. Produced by UNEP - WCMC in accordance with DECISION 10.79 OF THE CONFERENCE TO THE PARTIES, Directed to the Animals Committee, Regarding the implementation of Resolution Conf. 8.9, November, 2000. From: Species Survival Network, 2100 L St NW, Washington DC.

Wirminghaus, J.O.1997. Cape Parrot. In, Harrison, J.A., Underhill, D.G., Herremans, M., Tree, A.J., Parker, V., & Brown, C.J. 1997. The Atlas of Southern African Birds. Birdlife South Africa, Johannesburg. Vol. 1: 1-785.

Wirminghaus, J.O., Downs,C.T., Symes, C.T., & Perrin, M.R. 1999. Conservation of the Cape Parrot in southern Africa. *S.Afr.J.Wildl.Res.* 29: 118-129.

Wirminghaus, J.O., Downs,C.T., Symes, C.T., & Perrin, M.R. 2000. Taxonomic relationships of the subspecies of the Cape Parrot *Poicephalus robustus* (Gmelin). *J.Nat,Hist.* 36(3): 361-378.

Wirminghaus, J.O., Downs,C.T., Dempster, E.R., Symes, C.T., & Perrin, M.R. 2000. Vocalisations, and some behaviours of the Cape Parrot *Poicephalus robustus. Durban Museum Novitates.* 25: 12-17.

Wirminghaus, J.O., Downs, C.T., Symes, C.T. & Perrin, M.R. 2001a. Abundance and activity of the cape Parrot in afromontane forests in southern Africa. *African Zoology.* 26(1): 71-77.

Wirminghaus,J.O., Downs,C.T., Piper, S., Symes,C.T., & Perrin, M.R. In press. Distribution of the Cape Parrot *Poicephalus robustus* in South Africa.

Wirminghaus, J.O., Downs, C.T., Symes, C.T., & Perrin,M.R. 2001c. Fruiting in two afromontane forests in KwaZulu-Natal, South Africa: the habitat type of the endangered Cape Parrot *Poicephalus robustus. S.Afr.J. Bot.* 67: 325-332.

Wirminghaus, J.O.,Downs,C.T., Symes, .T. & Perrin, M.R. 2002. Diet of the Cape parrot *Poicephalus robustus* in afromontane forests in KwaZulu-Natal, South Africa. *Ostrich.*

Wirmnghaus, J.O., Downs,C.T., Symes, C.T., & Perrin, M.R. 2001b. Breeding biology of the Cape Parrot *Poicephalus robustus. Ostrich*. 72 (3&4): 159-164.

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